

ATHLETIC JOURNAL

VOL. XXXIV No. 3 November, 1953



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The ATHLETIC JOURNAL

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FRONT COVER ILLUSTRATION

One of the subjects to appear before our high speed camera as part of the free throw symposium was Don Schlundt who broke the Big Ten free throw record for the NCAA champions. Schlundt, a one-hand shooter, is sighting the basket before starting his throw. For action pictures on Schlundt see page 11.

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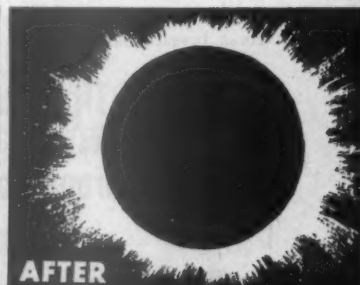
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from here and there



It takes a surprisingly large number of people to stage a football game. Recently, Michigan State figured out that approximately 1700 individuals are required to put on a home game at East Lansing. In round figures the breakdown is somewhat as follows: ushers 500; concessionaires 200; musicians 200; gatemen 100; police 100; parking lot officials 90; press box attendants 80; program salesmen 60; ramp guards and head ushers 100; cleanup men 30; players 100; coaches, training staff, ticket salesmen, officials, cheerleaders, etc., bring the total up to the 1700 figure . . . John Grayson, former highly successful Oklahoma high school coach and more recently coach at Nebraska Wesleyan, resigned to return to his alma mater, Oklahoma, as assistant coach to replace "Shocky" Needy who accepted a position as personnel director and basketball coach for an oil company . . . The ten most successful college coaches, percentage-wise are: Frank Leahy (883); Bud Wilkinson (873); Biggie Munn (813); Sid Gillman (800); Jim Tatum (791); Jess Hill (773); Earl Blaik (772); Warren Woodson (765); Ed Price (762); and Boddy Dodd (756). Incidentally, the average age for the major college head coaches is 43. The youngest is "Moose" Myers at College of the Pacific, the oldest "Tuss" McLaughry of Dartmouth . . . Secretary of the Navy, Robert Anderson, never played football in high school or college yet his first teaching job found him also football coach at Burleson, Texas, High School. The school went through the 1929 season undefeated. This was Anderson's third season as coach . . . Boise, Idaho, recently adopted the 6-4-2 plan, leaving just the junior and senior classes in high school. The school board then set up a full athletic program in all sports for the ninth and tenth grades in the four junior high schools. The football program is under the direction of head coach, Bob Gibb.

JOE WORDEN is not only the trainer for all varsity sports at Vanderbilt, but he directs the school's

extensive intramural program as well. Incidentally, Joe Worden holds a master's degree from the University of Texas where he was assistant for several years to Frank Medina . . . The return of single platoon football in college circles has caused several tragic cases in which good defensive or offensive players were unable to adjust and dropped out of football. It also produced many humorous incidents, as witness the case of Marquette halfback, Ron Drzewiecki, who had worked hard to perfect his blocking ability. Returning to the huddle after a driving block in the Cincinnati game he asked his quarterback: "How did you like that block?" Dick Shockey, the quarterback replied: "It was great, but you were supposed to carry the ball." . . . Clark Van Galder, Fresno College football coach, holds a unique coaching record in that he has never had a team finish below third place in conference standings and never had a team lose more games than it won in 21 years of coaching. Before coming to Fresno last year, Van Galder coached at LaCrosse State Teachers College and Racine and South Milwaukee high schools in his native state of Wisconsin . . . What is the most number of successive home games played by a team? As a starter, Yale had 14 home games in a row, extending over the 1943, '44, and '45 seasons. Beginning at the turn of the century and including this season, Yale has or will have played 472 games, with only 91 being away from New Haven. In the past 40 years, Yale has never had a season with more than two "away" games and in 21 of these seasons had only one "away" game.

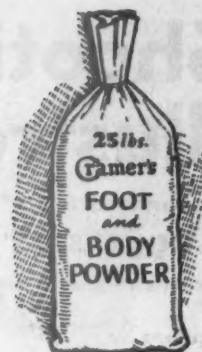
It doesn't take long for the coaches to grab any new invention which will assist them in doing a better coaching job. The new "Land" camera which permits the viewing of a developed picture within a minute after the picture is taken was used by Arne Arneson, field event coach at M.I.T., to show his vaulters and jumpers what

(Continued on page 40)

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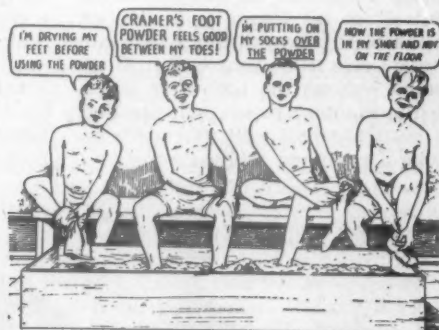


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Demonstrated by

CLARENCE "BEVO" FRANCIS

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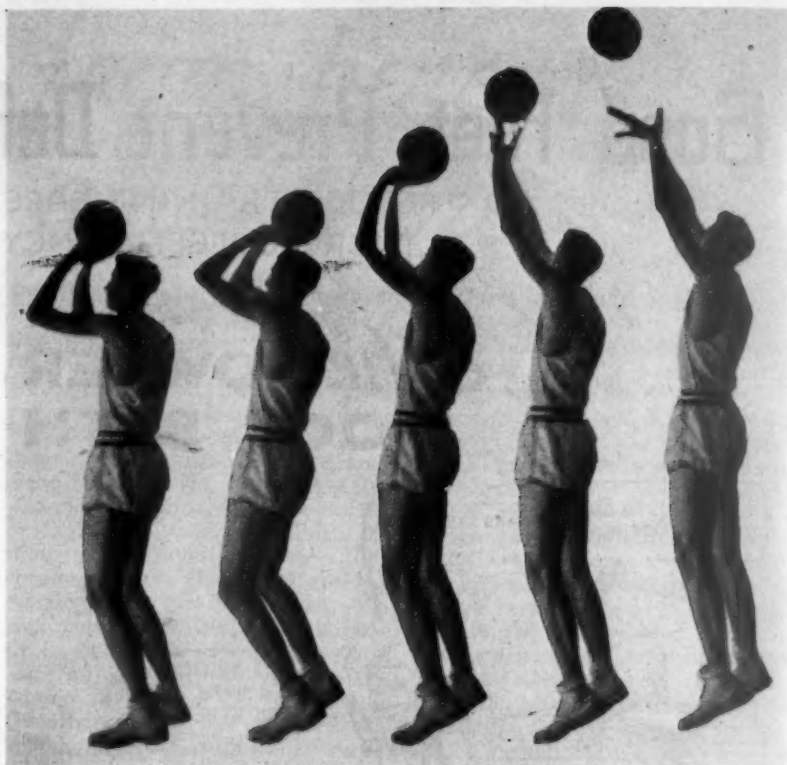
Captions by

NEWTON OLIVER

Basketball Coach, Rio Grande Coll.

OVERHEAD SET SHOT

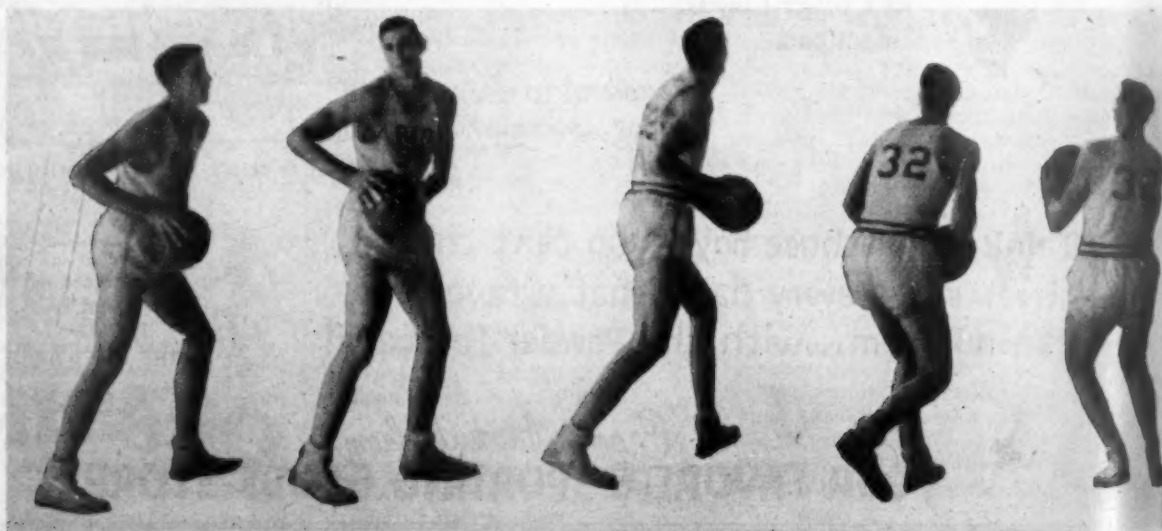
In *Illustration 1*, Francis holds the ball above eye level in order that he may aim for the goal. His legs are bent slightly. *Illustration 2* shows Francis as he lowers the ball directly above his head, with both hands extended well over the surface of the ball. He is standing on his toes with his legs bent slightly. In *Illustration 3*, the shot attempt is started as Francis begins to straighten out both of his arms. His hands are held slightly in back of the ball and his fingers are well spread. His legs have been straightened and are now in a standing position. Notice that good body balance is maintained throughout the first three illustrations. *Illustration 4* shows Francis as the ball leaves his hands from his finger tips. Notice the complete follow-through, with the shooter's eyes still on the basket. *Illustration 5* shows the ball after it has left the shooter's hands. Notice that his arms are still well extended, insuring a complete follow-through.

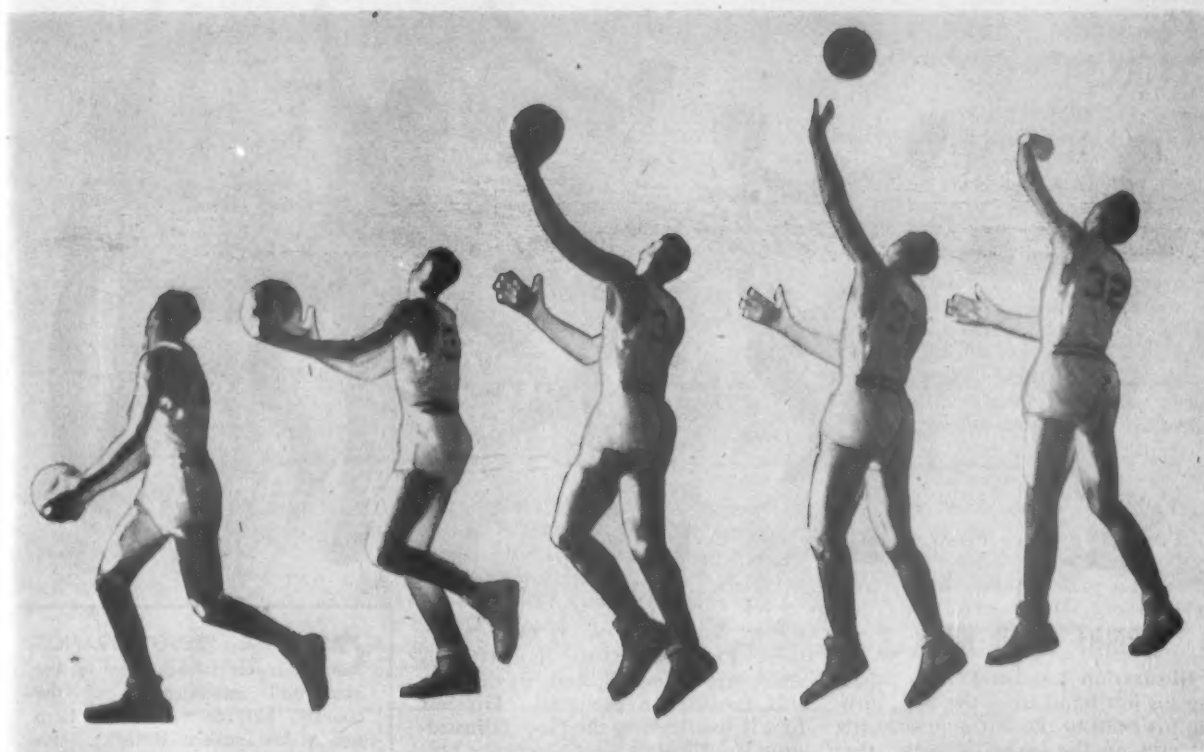


PIVOT AND JUMP SHOT

Illustration 1 shows Francis catching the ball approximately waist high, with his left foot extended to use as his pivot foot. Notice his right hand is spread over the top of the ball. The position of this hand does not change until the ball is shot toward the goal. Francis fakes a hand-off by turning his head and the ball (*Illustration 2*). *Illustration 3* shows Francis as he prepares to pivot to his left, using his

left foot. *Illustration 4* shows Francis as he shifts his weight to his left foot to begin the pivot that will turn his body so it will face the goal. His knees are bent slightly to give better body balance. In *Illustration 5*, Francis is now judging distance to the goal, with his eyes glued to the basket. The spread of his legs insures body mobility. Francis begins the shot by raising the ball above his forehead (*Illustration 6*). He sights along the ball to judge distance as he prepares to leave the floor with both feet.



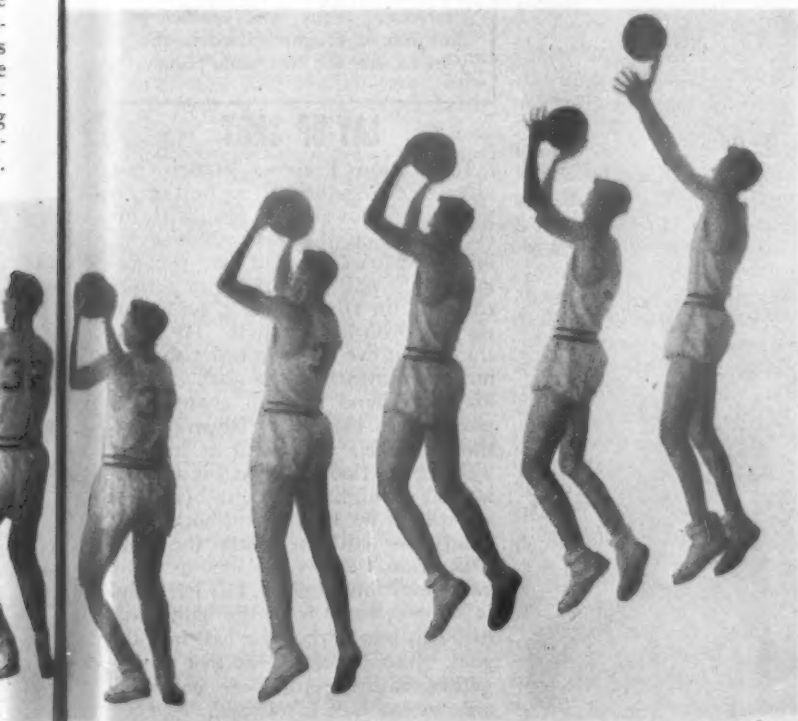


LEFT HAND HOOK

Notice how well balanced the ball is in his two hands. In **Illustration 7**, as the jump starts and the ball is raised still higher, his hands remain in the same position. **Illustration 8** shows the jump continuing, additional height being gained, and the ball

about to be released. In **Illustration 9**, Francis' left hand is released, while his right hand is well spread over the ball. **Illustration 10** shows Francis' left hand free of the ball as it leaves the finger tips of his right hand. Notice the complete follow-through.

In **Illustration 1**, Francis extends his right foot while holding the ball slightly below his waist. His hands are held opposite one another. The weight of his body rests on his right foot. **Illustration 2** shows the shooter releasing the ball with his right hand, after raising it from below his waist to the position it is in now. In **Illustration 3**, Francis has both feet off the floor. The ball rests in his left hand. His right hand is being used to help balance his body. Notice the excellent body balance and the extended fingers which insure control of the ball. **Illustration 4** shows the ball just after it leaves the hand of the shooter. His feet are well apart to help control body balance. Notice that his head is still turned toward the goal. **Illustration 5** shows Francis' left arm as it is being lowered. Notice the body balance is practically the same in both **Illustrations 4 and 5**.



NEWTON OLIVER graduated from Rio Grande where at one time he held the national scoring record. He did graduate work at Wyoming under Ev Shelton. Oliver began coaching at Upper Sandusky, Ohio, High School, in 1949 and two years later moved to Wellsville, Ohio, High School. Last year was his first at Rio Grande College.





RIGHT HAND HOOK

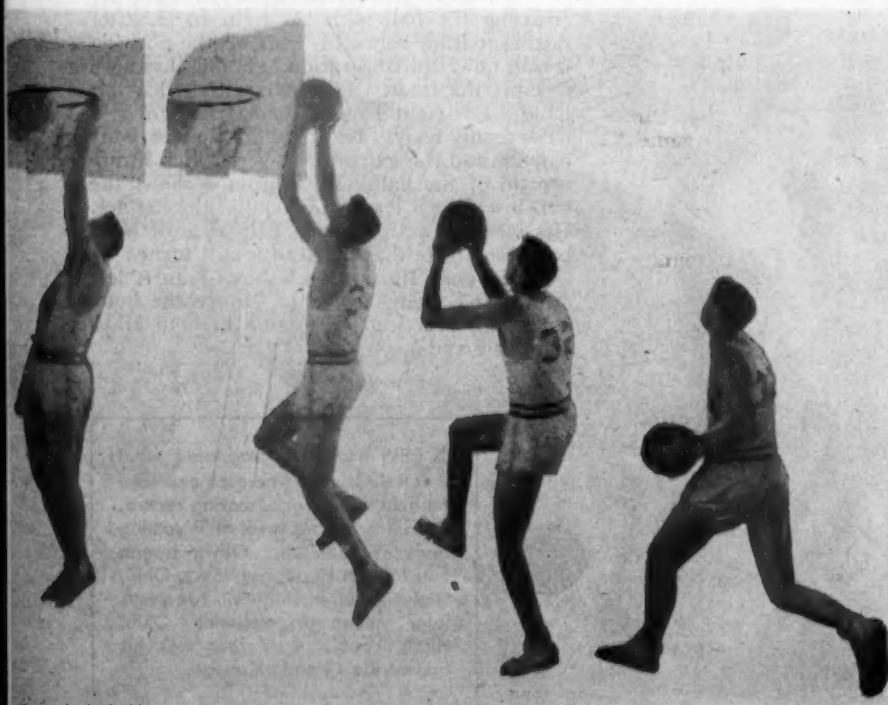
Illustration 1 shows Francis releasing his left hand from the ball, turning his head to the left, and focusing his eyes on the basket. Notice that his right foot is well off the floor and his wrist is helping to support the ball. In Illustration 2, Francis' right arm is extended, while his left arm is being dropped to the side. The ball now rests entirely on his finger tips, and his hand is turned to the

right. Now, he is ready to start the shot. Francis starts the shot with his right arm extended, and his eyes are still focused on the goal. His left foot is just leaving the floor (Illustration 3). Illustration 4 shows the ball as it leaves his finger tips. His right foot is being lowered in order to give better body balance. Notice that Francis' eyes are still fixed on the goal. In Illustration 5, his fingers are still extended, with natural body balance assured.

CLARENCE "BEVO" FRANCIS needs no introduction to the basketball intelligentsia of the country, but for the record here are a few salient statistics. He scored 1954 points in one season of collegiate competition. This figure included 538 free throws for a percentage of .761. His scoring record includes 116 points in one game and 179 points in two consecutive games in a period of 48 hours. Francis was chosen second team All-American last year as a freshman. Many are predicting that with a tougher schedule this year he will win first team honors.

LAY-UP SHOT

Illustration 1 shows Francis just after receiving the ball as he takes a giant stride toward the goal, with his eyes glued on the goal. Notice his left hand is well spread over the surface of the ball to help insure perfect control. In Illustration 2, he begins the jump on his left foot. He holds the ball at eye level, in order that he may concentrate on the goal. Notice his right hand has not changed its position on the ball. Illustration 3 shows Francis with both of his feet well off the floor. The ball is approximately as high as the goal. His eyes are still on the basket, and both of his hands are still steadying the ball. Illustration 4 shows the shooter as he gains additional height. His left hand is being released from the ball, while his right hand drops the ball into the goal. Notice both of his feet are together, insuring complete body balance as the ball is released.



Free Throws— Frozen Assets or Redeemable Dividends?

By RICHARD B. MORLAND
Basketball Coach, Stetson University

In presenting the free throw symposium on this and the succeeding three pages, we have tried to represent a number of different sections of the country. Dick Morland, whose article appears on this page, is from Florida; John Bunn, whose article appears on page 12, is from New England; "Bunny" Levitt represents the Middle Atlantic region; and Cliff Wells is at Tulane University in New Orleans. Don Schundt and Eddie King, the two undergraduates who posed before our high speed camera, are Midwesterners from Indiana and Bradley Universities.

In a recent article in the Book Review Section of the *New York Times*, J. Donald Adams made the stimulating statement that most of our prominent creative writers are addicted to some sort of obsession that pervades all of their writings. To support his thesis, Mr. Adams pointed out that Hemingway was obsessed with death, Marquand with frustration, Faulkner with evil, Sinclair Lewis with the double affection of irritation and indignation, Fitzgerald with wealth, and Wolfe with life itself.

If such eminent writers as these are impelled consciously or unconsciously by some dynamic driving force, it is not too far removed to contend that basketball coaches have their obsessions too. Some build their entire game on speed, others are given to a slow, deliberate attack; some consider the precision and timing of set plays as all-important, others delight in the *give-and-go*; some place the greatest premium on ball possession, while others are obsessed by the sight of the ball sailing toward the basket, urging their players to shoot often and play the percentages; some are sticklers for training and endurance; some for emotional control; and some are so intent on winning that all other values are overshadowed by the final score.

Our personal obsession is the free throw. Nothing is more frustrating or disheartening to a coach than to

watch a player miss a gift toss at a crucial point of the game, or at any other time for that matter. The coach knows that the player has made the identical shot in practice hundreds of times; he stands unmolested only 15 short feet from the basket, yet statistics show that he will miss in approximately 40 per cent of his attempts.

It is not to be expected that the coach will never be disappointed or the absolute perfection will ever be achieved in free throwing. But the fact remains that free throw shooting is one phase of the game that can be improved but which seems to be at a standstill. Potential points remain frozen instead of being converted into valuable dividends.

In the National Invitational Tournament, exhibiting the cream of the nation's players, the free throw shooting has hovered around 62 per cent for the past several years, which is considerably above the national average. In the regular season play, rare is the team that will not default ten or more points due to ineptitude at the free throw line. Too often for comfort, the margin of defeat lies within this range.

Reasons for Failure

The reasons for poor free throw shooting, as we see them, are twofold: the psychological impact of the actual game situation affecting the

player's nervous stability, and the failure to develop a sound free throw in practice.

In a previous article we stated that the inability of the player to concentrate on the immediate task at hand to the exclusion of all others was the primary cause for missed free throws. To develop this type of concentration, it was demonstrated how situations could be created in the daily practice session that would approach the pressure exerted during the game. The purpose of this article is to dis-

cuss the mechanics of the free throw with a view toward helping the player develop the most accurate shot that he is capable of making.

There is no consensus among coaches as to which style of free throwing is the most superior. Some coaches are convinced that a certain way is *the best* and have all of their players use this particular method. Still other coaches adopt an attitude of indifference. They permit their players to shoot in any fashion that pleases them at the moment, sharing in their hope that they will be lucky during the game.

Between these two extremes there seems to be a sensible middle ground. Basketball players are not automata, but human beings, each with his individual differences, strengths, and weaknesses. It is just as unreasonable to expect all players to shoot in exactly the same manner from the free throw line as it would be to say that they should all make the identical set shot from the floor. Yet, there is a science to basketball and once the player has adopted a particular style, there is a definite technique which should be followed in order to make certain that the player is shooting correctly. The player does not hit on this haphazardly. It takes careful coaching and meaningful practice.

In determining the method of the free throw, these questions should be answered affirmatively:

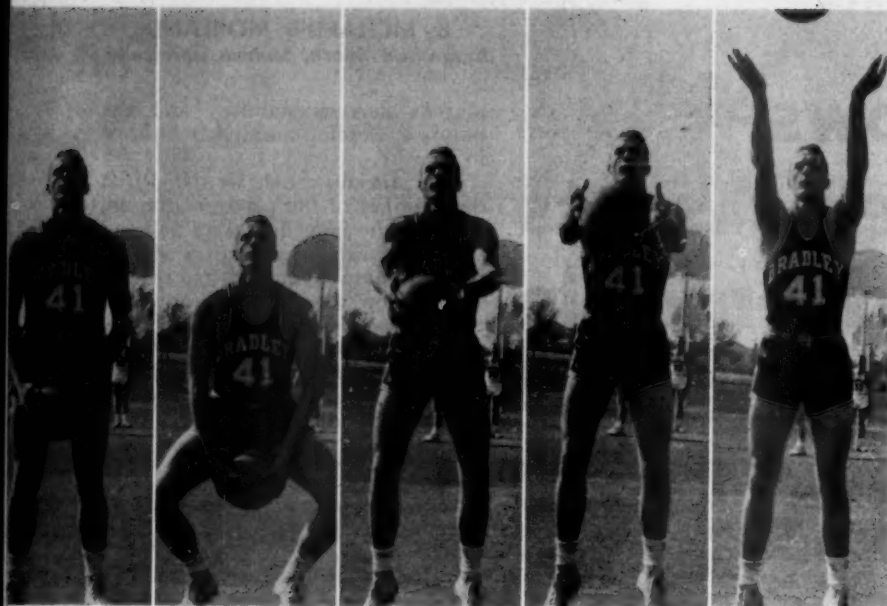
(Continued on page 52)



Underhand

Demonstrated by
EDDIE KING

Captions by
BUNNY LEVITT

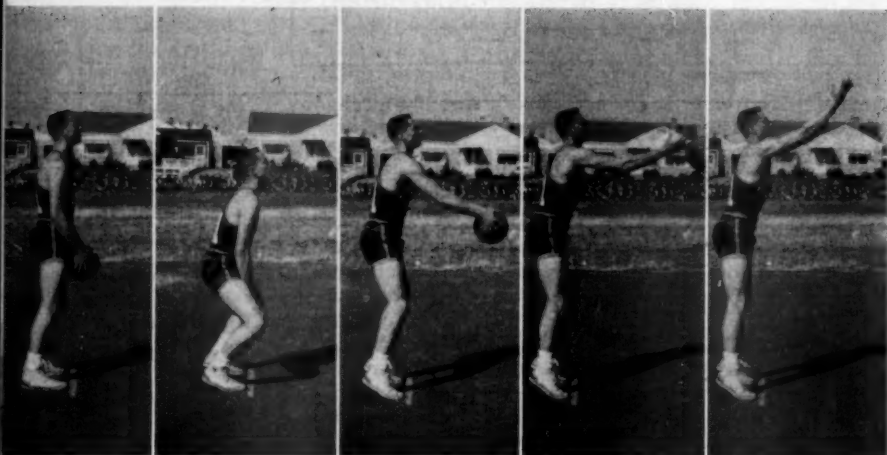


ACCURATE free throw shooting makes the difference between winning and losing closely contested games. It does not matter what style a shooter uses as long as he makes his shots. However, if a player cannot make a good percentage of the shots with his own style, he should learn to shoot a two-hand, underhand shot. Once a player achieves fair success with a method, he should stick with it and not change.

Relaxation, concentration, confidence, and follow-through are necessary. The player should bounce the ball in order to relax. Then he should inhale and exhale. A properly inflated ball should be used for all practice. Correct form should be used, especially after running drills. Before taking a free throw, the shooter should look back to see that the defense is set. He should take his time, and get set on the line.

The shooter's feet should be 18 inches apart. Both feet may be parallel or one foot may be forward. The individual should use the position which is the most comfortable for him. His trunk and head should be erect, eyes on the front of the rim, and his hands should be on the sides of the ball. The ball should hang

(Continued on page 49)



DEMONSTRATING the two-hand underhand free throw is Eddie King of Bradley University. Last year in 23 games he attempted 69 free throws and made 57 for an outstanding average of .826.

Harold "Bunny" Levitt is generally recognized as the world's greatest free throw artist. At one time he shot 499 consecutive free throws without a miss and somewhat later shot free throws for seven and one-half hours, missing only two out of 871 tries. In his work as a special representative for the Converse Rubber Company he has demonstrated his technique before more than a quarter of a million coaches and players.



One Hand

Demonstrated by
DON SCHLUNDT

Captions by
CLIFF WELLS

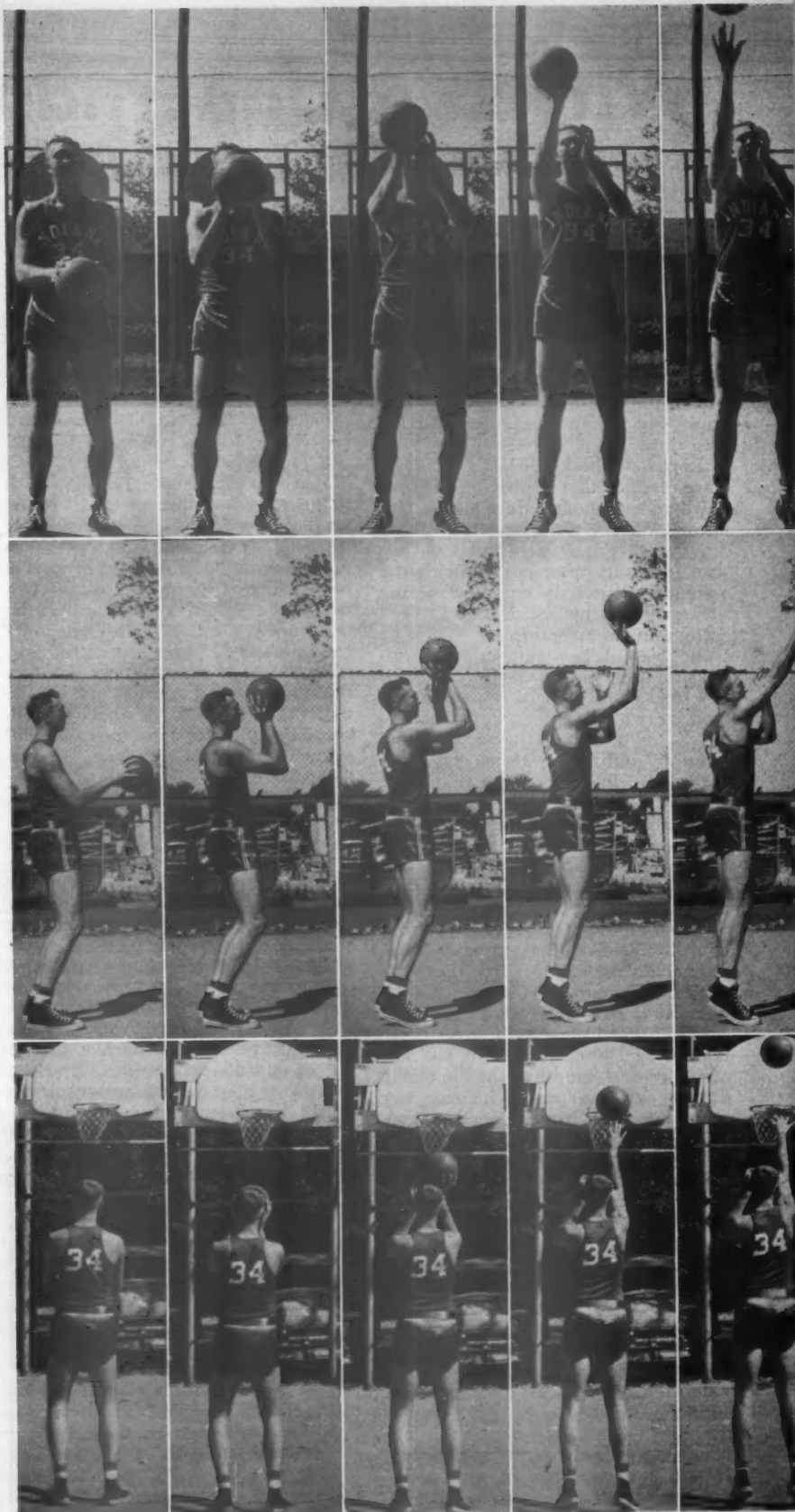
AS a coach starting grade school youngsters in free throwing, we firmly believe in trying the two-hand underhand style first as it fits the age. Most youngsters form bad habits in trying to learn the one-hand shot from a distance as far as 15 feet. However, when we find a high school boy or a college freshman with good form in any style he may have perfected, then we help him to improve in his own style, whether it is so-called good, accepted form or said to be unorthodox. The word unorthodox has no meaning along that line for us as we say it is the boy's natural way of getting the job done. We do not care if our players bounce the ball in the goal as long as it goes in. We are interested in results. Nothing succeeds like success. Any boy who makes at least 60 per cent of his free throw shots in games is considered all right in our way of coaching.

The form of Don Schlundt, Indiana University's fine pivot player, is shown here. Illustration 1 shows Schlundt's feet spread slightly in almost a square stance. He has good control and feel of the ball with both

(Continued on page 40)

DON SCHLUNDT of Indiana broke the Big Ten free throw record last season. Using a one-hand throw, as shown, he scored 175 free throws in Big Ten games out of 213 attempts for an amazing .822 percentage. For the whole season his record shows 200 completions out of 246 attempts. He also broke the record for the most free throws in one game by registering 17 in the game against Michigan.

Cliff Wells began his coaching career at Logansport, Indiana, High School, where he enjoyed outstanding success. Eight years ago he moved to Tulane and continued his winning ways, winning better than seven out of every ten games played.



FREE THROW SYMPOSIUM

Why the Underhand Throw?

By JOHN W. BUNN

Basketball Coach, Springfield College

THE new rules of basketball, which remove the option on free throws, give a substitute throw on one shot fouls if the first attempt is missed, and award two shots on all fouls during the last three minutes of a game or overtime, place added emphasis on the importance of free throws. They also emphasize the value of avoiding fouls, but this is a discussion of the free throw.

Repeated checks through the years have revealed that approximately one-third of our games are won on free throws. We mean that the winning team scores fewer field goals or just as many as its opponent. During the past season, exactly one-third of the games played by Springfield College were won on free throws. The last game was of particular significance because the winning team made seven less field goals than its opponent, yet won by two points.

A study of the relative scores of the winning and losing teams has been made. During each of the past three years, the scores of 1500 games have been tabulated. The startling revelation was that approximately 50 per cent of these games were won with the margin of victory being ten points or less. When a coach realizes that a team has an opportunity to shoot from 20 to 40 free throws per game and that the general average for free throws is not more than 60 per cent, high schools for 1952 averaged 51 per cent, the real significance of the free throw is impressed upon him. An increase of 10 per cent, assuming the opponent did not improve, would increase victories by as much as 25 per cent. A 20 per cent improvement would make a team practically unbeatable. Now, add to this a reduction in fouling which deprives the opponent of opportunities for free throws and the possible results from improved free throwing becomes positively startling to say nothing of the demoralizing effect it has upon the opponent.

All of the foregoing is preliminary to a discussion of the free throw. It points toward renewed effort and provision for practice time commensurate with the importance of this phase of the game. Certainly, attention should be given to the technique of shooting. Herein lies the crux of much controversy at the present time. Literature

reveals without a shadow of a doubt that the large majority of our leading coaches advocate the underhand method of free throwing. However, these same coaches do not practice what they preach. Why? The usual answer is that if they have a player who shoots well by using some other method they see no reason to change. If, however, a player shoots poorly, less than 70 per cent in practice, by his own method, then he is changed to the underhand method as if this were punishment or discipline for the poor shooting by some other method. If there is a logical reason for the underhand method or if it is better, then it should be equally better for the good shooter as well as the poor one. I am probably the only college coach, at least one of the few, who has each player shoot all free throws exactly the same and by the underhand method. We have not followed this practice without reason and evidence. Recently, some experiments have been carried on to further explore the validity of these reasons. But, first, we will give the reasons.

Everyone seems to agree that relaxation is the primary essential to accurate shooting. Certainly, when the arms are hanging down they are in a more relaxed position than when they are bent at the elbows, with the hands at least chin high as in the two-hand push shot. Likewise, most of our leading coaches state that the underhand shot has been replaced as a floor shot only because of the fact that it can be guarded too easily. Since the free throw is an unguarded shot, there would be no reason to discard the

underhand shot in the case of free throws.

There are other reasons for using the underhand shot for free throws. Power for the shot comes from the swing of the arms from the shoulders. The wrist and finger movement is used only for control purposes. Power from this source is so much greater than is needed that fatigue effects are not so damaging. In the two-hand push shot, for example, the power comes largely from the wrists and fingers, where fatigue effects can be noticeably greater due to the relative difference in the strength of the muscles controlling these members as compared to the muscles controlling the swing of the arms from the shoulders. The fact that the ball is brought between the legs at the start of the underhand shot, and again following the rhythmic relaxing practice swing, provides a guide for the movement. In this way, the possibility of *grooving* the shot is enhanced. Finally, the uniformity of shooting free throws by all players tends to remove the psychological hazards. There is no tendency to desire to change to the form of a teammate if a shot is missed. The practice of all shooting by the same technique tends to remove the mental reservations of those players who are skeptical. Thus, the morale effect is strengthened by this group action. Certainly, no coach will minimize the value of morale.

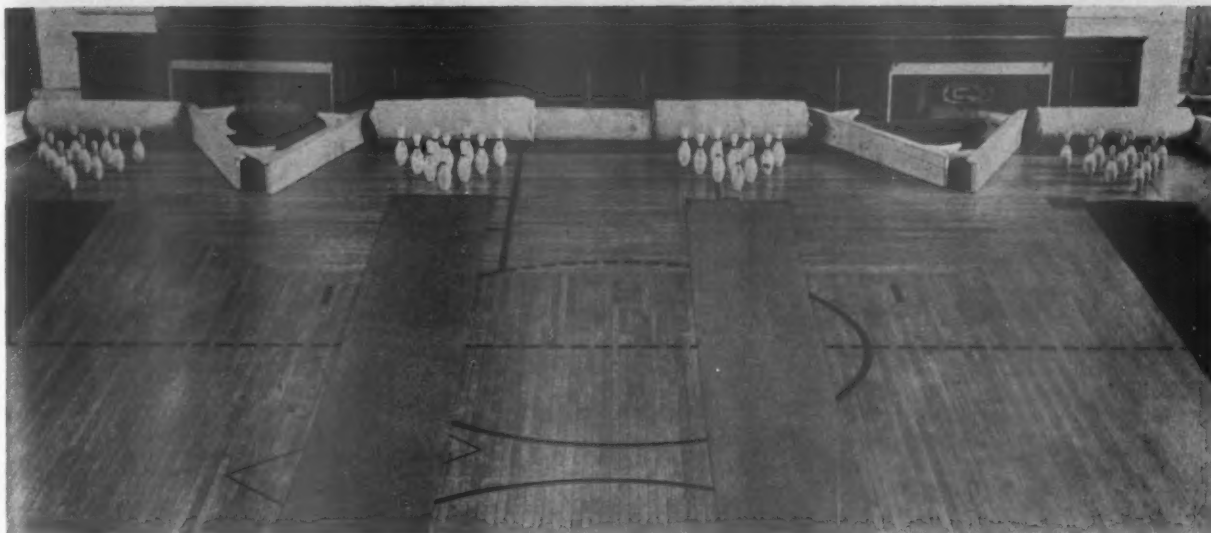
Now, even though one accepts this reasoning as logical, it must be validated by evidence and experiments before anyone should be moved to adopt the plan. The following may be helpful and convincing.

In the first place, we have never been associated with but one team which did not have a better seasonal free throw average than that of its opponents. All of the players on our teams have shot their free throws by the underhand method except in certain experimental situations. None of our opponents has used the underhand method exclusively. Likewise, the free throw average of each of our players has never failed to improve. This evidence would seem to argue that at least no disadvantage accrued from the methods employed.

Recently, several studies have been

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JOHAN W. BUNN played under "Phog" Allen at Kansas and was his assistant for ten years. He then moved to Stanford where his teams won three Pacific Coast Championships. During his tenure at Stanford he was also dean of men. At Springfield College, John Bunn also serves as athletic director and is a past president of the National Association of Basketball Coaches. He is the author of "Basketball Methods" and "The Art of Basketball Officiating."



Bowling in Junior High School

By REX AURAND

Athletic Director, Garfield Junior High School, Port Huron, Michigan

EDUCATION has a much greater and more difficult job in modern society than it had in former days. Not only do we conceive our work to be that of teaching, as represented by subject matter subjects, but we have added other objectives, as the world in which the child must live and compete has changed. Well-adjusted happy living during the school years and in adult life is our goal.

To this end we feel that the school must supplement the home and church in helping to develop a philosophy of life that will stand the stress and strain of modern living. It must help to develop a set of ethical and moral values which permit the child to see and accept his responsibility in a democratic society. In order to be ready to assume his rightful place, the child must receive help in understanding his abilities, talents, and interests, and in developing skills that will open the way to a vocational area — a means of earning a living.

However, since the child must also find a place for himself in non-vocational areas, if he is to be well-adjusted, educators feel they must provide him with as many social skills as possible. Thus, he will be able to find an entry into social groups and gain the companionship and the recognition necessary to satisfactory living. Therefore, more and more emphasis is put on physical and social skills that can be practiced in adult life, rather than just during youth. Worthy and pleasurable use of leisure

REX AURAND graduated from Michigan State and began an outstanding coaching career which included all types of schools from the small Class D up to the large Class A schools. During the war Aurand was attached to the Medical Corps specializing in physical reconditioning. Since the war he has held his present position.

time is now considered very important to mental health.

We believe that worthwhile use of leisure time constitutes a definite need of our students, and we have endeavored to meet this need. In 1948 a bowling activity period once a week was started in our seventh, eighth, and ninth grade physical education classes. Sensing that there might be considerable interest in this type of activity, we conceived the idea of setting up two bowling alleys on our gymnasium floor. The continued interest was so great that we decided to expand participation to include a greater number of students. To do this our school administration set up a Bowling Exploratory Class.

Exploratory classes are attempts to augment the regular classes in the ninth grade to further non-vocational area objectives. Exploratories are so called because their chief purpose is to give the student an opportunity to explore different areas of interest to

find out whether he has a real interest that he would like to continue. Often, students find that this interest may lead to a vocation or lifetime hobby. These groups enrich the program, help to hold children in school, impart knowledge not in regular textbooks, and develop poise and skills in democratic and social living.

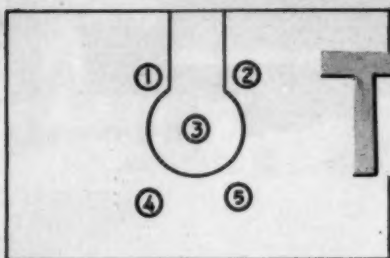
Our Bowling Exploratory Class meets one hour a day twice a week and is open to any ninth grade boy or girl who desires to explore this type of interest. This class is limited to a group of 40 different students each semester. It is our feeling that ten children assigned to one alley constitute the maximum number that can be handled in one hour. Bowlers on each alley rotate in setting up the pins.

To further participation in the bowling activity this year we placed it in our noon hour recreation program for those boys and girls who use our cafeteria and lunchroom facilities.

During the past five years approximately 75 per cent of our junior high school students had the opportunity to experience this activity.

In all classes there must be constant supervision and instruction in order that all safety rules will be followed. Some of the more important rules are: 1. *Pin Setters*. Stand outside of the benches when the ball is being rolled. 2. *Bowlers*. Do not throw the ball so hard that it can-

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TRIPLE POST

By MARSH POTTER

Assistant Basketball Coach, Fairmont, Minnesota, High School

ALTHOUGH there are many problems confronting the coach in the small high school, we believe the physical plant is the greatest obstacle. The fact that his teams have to play on floors which are of different sizes makes offensive play a problem at its best. Next to floor size, we would say that facilities such as a sufficient number of baskets, proper lighting, and good locker facilities do have an effect on the coaching results. Within the next ten years, we believe we will see floors of comparable size, and facilities up to high school standards in all small schools in our area. Right now, however, the problem the coach in a school of any size faces is this transition period and how to overcome the floor advantage.

Our athletic conference is made up of schools whose gymnasiums vary in size from the large to the small; consequently, it is a rare occasion when a school completes an undefeated season. At Elmore, we were blessed with a large gymnasium, but in the past had always felt the disadvantage of playing on small floors. Since all tournaments are played on large floors we felt it was better to prepare our squads for a style of offense suited to regulation size floors.

In previous years we have always maintained a good winning average on large floors, but a poor average on small floors. Too many adjustments had to be made in our style of fast break and set play offense to make it effective against the natural defenses set up by the narrow floor or the crackerbox gymnasium. The triple post was developed to make these adjustments easy for our boys.

When the 1952-53 season began, we

met with the rest of the coaching staff and analyzed our situation. Ten players were returning from last year's A and B squads. Five boys were juniors and five were seniors.

In this group we had one outstanding boy with better than average ability. This lad could shoot with either hand and, in general, was a good dribbler, smart ball-handler, and an excellent rebounder for his 5 feet, 11 inches. We decided to build the of-

which would give us the benefit of their talents, and yet fit in with our plan to feed the best scorer.

The two tall boys, 01 and 02, were in the awkward stage; if we were to go anywhere we had to rely on their height. Thus, they became part of our triple post attack.

We had one boy, 04, who was an exceptional dribbler, a good passer, and a fair long shot from out on the floor. His disadvantage was the fact that he was small; however, we decided to take advantage of his abilities. The remaining boy, 05, was a good shooter, but he could never gain enough confidence in himself to shoot often. He was a good feeder, had fair height, and was excellent defensively.

With this type of personnel, we decided to build an entirely new offense; one which, as it turned out, was responsible for the best winning season in the school's history.

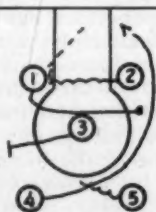
We set our two tall boys, 01 and 02, as posts next to the dotted line of the key as shown in the accompanying diagrams. They were instructed to screen on each other continually. Our best boy, 03, was set on the free throw line in a posting position. Fundamentally, the positioning of these three men gave us our triple post attack. The defense had to play either inside our post men or in front of them as much as possible. Thus, our players were in excellent shooting or rebounding position.

Our instructions were to feed the boy on the free throw line as much as possible. His options were to fake and drive around a screen, to take a set shot behind a screen, or to jump shoot from the free throw line. He was also in a position to screen on the

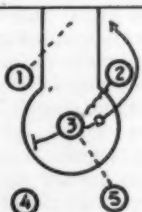
MARSH POTTER graduated from Minnesota and began his coaching career at Grand Rapids. Then he moved to Round Lake, his former location, where he was for five years. In addition to basketball, Potter coaches football and track. Potter played on three Milwaukee City High School championship teams under Bernie Heselton, who is currently coaching at Lawrence College.

fense around him, but felt that he must be given the type of offense which would prevent the opposition from defending him. After a few weeks of practice we teamed him with two boys who were 6 feet, 1 inch tall. Our guards were 5 feet, 11 inches and 5 feet, 5 inches tall.

The tall boys were needed for rebounding but normally they would be too slow and awkward to fit into our regular pattern which had been used in previous years. These boys were fair shooters, if close to the basket, and we felt they could be taught to tip. Therefore, we wanted an offense



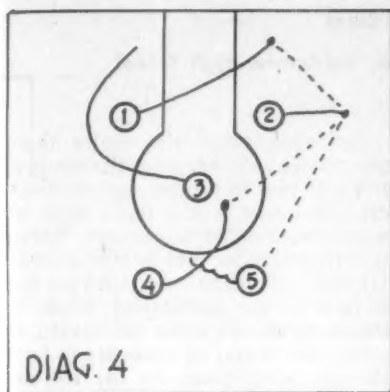
DIAG. 1



DIAG. 2



DIAG. 3

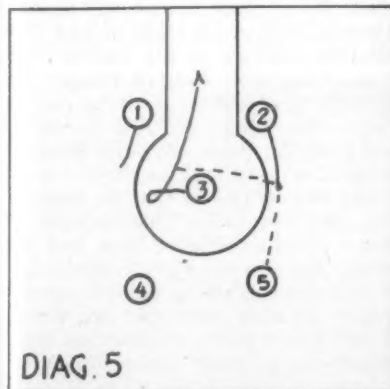


post or the guards. This boy's point average for twenty-three games was 22.8. His shooting average was 24 shots per game.

We had an excellent position for rebounding on all shots because the close screening caused difficulty for our opponents. Normally the opponents would place their best man on 03, but we screened him out most of the time. In this offense, by playing a tight triple post, we left room for a guard around shot, driving straight to the basket when the guard discovered our opponents pinching us or sagging off on 03.

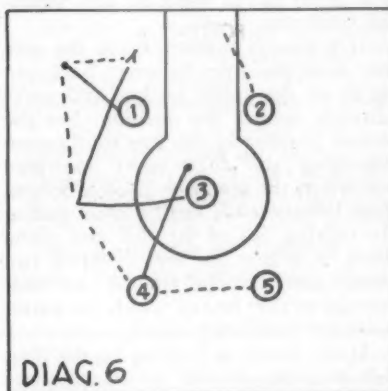
Here was an offense which could maneuver on a small floor as well as on a large floor. Ten patterns were set up to meet all situations. We found these patterns helped a natural defense against a fast-breaking team in that we made the defense play close together, and, therefore, obtained many held ball situations. In this way, we had two men at the guard posts on defensive positions most of the time.

Our record this past season was 18 wins and 5 losses. We won our conference championship because we could win on the small and large floors. Also, we were sub-district champions and finalists in the district.



In our opinion, the triple post is the ideal offense for the small school. An opportunity is afforded the one good boy a school may have to obtain his maximum effort. It offers to the tall but awkward boy a chance to play without showing his apparent awkwardness. It is a good rebounding offense for the slow, big player. Best of all, it permits screens easily without too much preparation.

To summarize this offense, we have the two largest boys placed at positions 01 and 02. 03 is the best all-round player on the squad. We have him practice shooting behind screens and driving both ways toward the basket. He must be a driver whenever possible. For the most part, 05 is our play-maker. In addition to feeding and shooting the necessary long shot, he must be a fair dribbler. 04 is used for driving or giving us defensive balance against a fast break offense.



The triple post is patterned off these ten basic plays:

In the play, which is shown in Diagram 1, 05 brings the ball up the floor, fakes to 03 cutting to his right, and then hook passes to 01 who is screened by 02. 05 screens on 04 who cuts around 01 and drives for the basket.

05 fakes to 04 and feeds 03 who fakes either way (Diagram 2). The man opposite the way 03 fakes, comes up and screens so 03 can jump shoot or drive around and to the basket. Both 01 and 02 cut for the basket to rebound.

Diagram 3 shows a play in which 05 fakes to 03 who also fakes. Then 05 hooks a pass to 01 coming over on a screen by 02. 01 fakes as if to drive in and then pivots to the outside, handing the ball to 03 who is coming around for a drive or a jump shot at the basket. 05 screens on 04 who cuts to the outside of 01 for a possible feed should he fail to give 03 the ball.

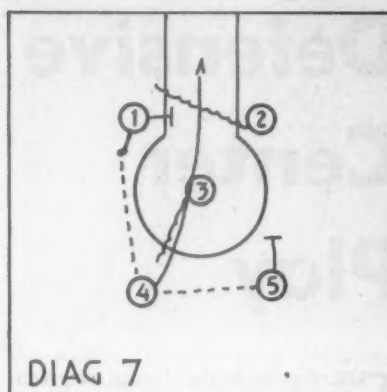


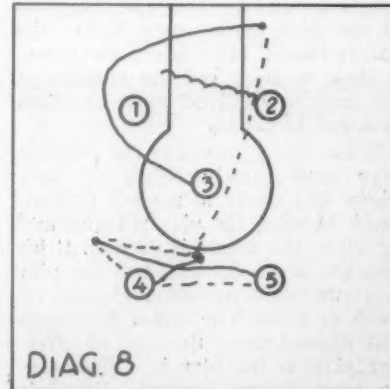
Diagram 4 shows a play in which 05 feeds the ball to 02, fakes in, and then breaks to the outside. Pivoting back quickly, he has a choice of feeding 01 who is inside his man and is cutting for the basket, or he may feed into the hole to 04 cutting off 05's screen. 03 decoys to the weak side for a rebound.

If the opponent should play to the outside of 01 and 02, or in front of them, there are many options (Diagram 5). 01 and 02 may cut for the basket and receive a looping pass, or these boys may break inside and to the free throw line to receive a short pass. 03 fakes in the opposite direction of the receiver and then rolls back to receive an inside pass. Then he drives for the basket.

The play shown in Diagram 6 is used mainly against the zone. 05 passes quickly to 04 who feeds 03 breaking out to the side. 03 passes quickly to 01 who is breaking out to the corner. 03 and 04 cut. 03 goes to a position inside of 01 and 04 goes to the dotted line as shown in the diagram. A pass may be made to either player. 02 gets rebound position on his man.

Diagram 7 shows a semi-weak side drive. 04 receives the pass from 05 and hook passes quickly to 01 who has

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Defensive Center Play

By Arch Steel

Director of Athletics, Corcoran, California, High School

THE fact that the center is given the option of changing his position at the dictation of his judgment, and every time he changes his position the entire team must adjust itself, makes him almost entirely responsible for the selection of the type of defense and its maneuvering. For these reasons the center is usually designated as the defensive captain of the team.

The down, yardage to gain, and the position of the ball on the field go hand in hand as determining factors of defensive play. They are the most important indications the defensive player has, and yet how often do we find that he is indifferent to his responsibilities. It is essential that the center know these three things on every play.

In present-day football, the times a center plays in the line are comparatively few. If the ball is deep in the territory of the opponents, first down, the center may play in the line, because a pass is not at all probable. If the center wants to strengthen his line, he may play a six-man line and be a backer-up. From the position of backer-up, he is better able to meet such plays.

After deciding what general type of defense is the most suitable, the center must now cope with the play itself. In order to handle the play properly, it is essential that he be a good diagnostician of plays. The diagnosis of the play begins even before the ball is passed. Here again, the down, yardage to gain, and the position of the ball on the field must be taken into consideration.

When the diagnosis of the play has been made, the problem of how, when, and where to meet it presents itself. Meeting the play is influenced by where the center is playing. If his position is on the line and the play is a run, then he either charges in, waits, or drifts. The course he chooses will depend upon the type of offensive play. If the play is a close one, he may charge through. Certainly

against an attempt for first down and plays on the goal line, the center will play low, with both hands on the ground, and charge in low and hard, grabbing everything he can.

If the center is in doubt as to what the play will be, then the noncommittal thing for him to do is to wait. Waiting is done by shooting his hands out onto the offensive men and holding them off until the play materializes. From this point, the center may either charge on through or drift. The majority of times the center will drift, and he should always drift on plays that are not run directly at him. In order to drift properly, it is best for the center to give ground a yard or so until he is clear of the line, and then shoot out along the line, keeping his hands out to ward off any would-be blockers.

If a pass is thrown while the center is in the line, he must back out with all the speed he has and cover directly behind his position. For the center playing in the line to diagnose the play and then cover anywhere except in the territory directly behind him is impossible against most passes. In coming out of the line and going back, it is best for him never to run backwards, but he should run half turned so that he can watch the passer without sacrificing speed.

If the center is backing up the line, his position should be about three yards from the line of scrimmage. From this point he is close enough to meet line bucks and close plays on the line of scrimmage, and he is far enough back so that he can meet wide plays without getting boxed. He should stand erect so that he may easily see into the opposing backfield and be poised with his weight on the balls of his feet. Line bucks and close plays should be met low and hard on the line of scrimmage.

ARCH STEEL graduated from Bowling Green University in 1940 and coached for two years before entering the navy. Following the war, he guided Lincoln Park, Michigan, High School to two league championships in four years. In 1950 Steel became backfield coach at Michigan Normal, a post which he resigned this past summer to accept his present position.

On wide plays, the center drifts fast to the side, keeping his hands in front of him to protect against blockers. His course is at a slight angle towards the line of scrimmage. Rarely is it necessary for him to give ground. He drifts in this manner until his way is clear to the ball-carrier. Then he shoots in fast to make the tackle. In some cases it may be necessary to fight through interference to the ball-carrier.

When the center expects a pass, he should drop back a step before the play starts. As soon as the pass is diagnosed, if he is playing a zone, he must get into his zone immediately; if he is playing man-for-man, then he must get sight of his man quickly and cover him. The important thing in covering a man is for the defender never to let the receiver get ahead of him. In zone defense, if two men come into the same territory simultaneously, the deepest man is the one to cover. After the ball has been thrown, it should be played, not the receiver; and it should always be intercepted, unless the down is the fourth.

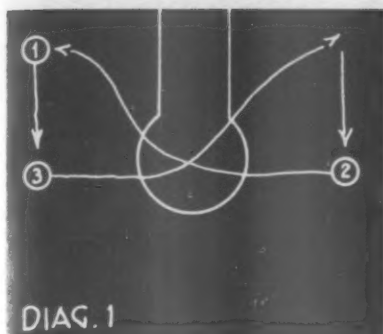
Defense Against Punts

Defensive play against punts has a technique all its own, and every time the center is sure the offense is going to kick, he should attempt to block the kick. The center has several methods at his disposal for breaking through. First, he may work with his guards in the center of the line, and have them pull the opposing center and guard apart while he rushes through the opening.

Second, he may work out on either flank with his tackle. Here the problem of which side to work from presents itself. Since the punter usually steps a little to his right to kick, the shortest distance to the ball is from the strong side; but, of course, the greatest protection for the kicker is from the strong side. It is better to try from the short side. The thing to remember is to rush to the inside in front of the kicker. On the snap of the ball, the tackle charges wide to draw out the defensive back, and the center has an open alley to the kicker.

If a center plays on the line against punts, he must remember one thing: *Never play a punt formation on third down for a punt.* Third down re-

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BASKETBALL coaches, in general, will agree that a great deal of time must be spent in order to develop a truly effective screening offense. Most offenses of this type depend on one player moving to a correct screening position at the proper moment. When running through drills the boys may perform these screens faultlessly. However, when they are in a game situation their screening drills are quickly forgotten.

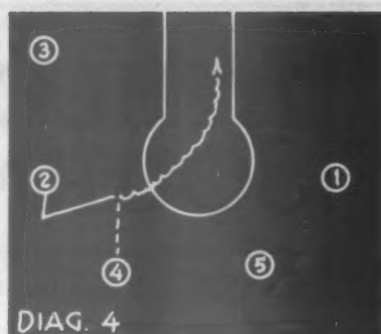
We experienced a situation of this kind several years ago and at that time sought some pattern of play

ceive a pass, and drive in for a close shot. At first glance this maneuver may appear to be too simple to be effective, but the many options which are present give scoring power to this offensive pattern.

Diagram 1 shows the basic pattern. 03 cuts from the sideline across the middle to the opposite corner. 03's cut will place two men on one side of the court. Whenever there are two men on one side the front man always has the right of way in cutting. After his cut there will be two men on the opposite side of the court and the pattern is merely repeated. In our fundamental drills this pattern is run through, first, without the ball, second, with a guard passing to the cutters, and, third, with a defense.

It will be noticed that we do not clog the center by placing a pivot man on the lane. All three of our front men, at one time or another, will act as pivot men.

Our original reason for leaving the center open was due to lack of height on the part of our players. Not only did this pattern offense give the boys greater opportunity to free themselves



from their defensive men. Although this offense was originally set up as a screen pattern, we found the smart forward was able to break clear quite frequently by making use of effective fakes or defensive lapses.

Our underneath weave offense can be divided into three specific parts for practice purposes. The forwards may work together as a group in setting up their screens and getting away from their defenders. The guards may also work together in setting up screens, rolling screens, etc. Then the two groups can be brought to-

The Inside Weave

By **ANDREW W. GRIEVE**

Athletic Director, Van Etten, New York, Central School

which would guarantee, to a greater degree at least, our number of effective screens. The outcome was, what we call, the inside weave. Actually, it is based on the three-man weave which has been used as an offense in basketball for sometime. However, our weave is not based on the original principle of utilizing it away from the basket. Using two men out and three in, the three front men set up this weave as a method of freeing themselves from the defense for an inside shot. By weaving underneath, the forwards are able to break free, re-

from the defense, but it also tended to pull the taller opponents away from the basket.

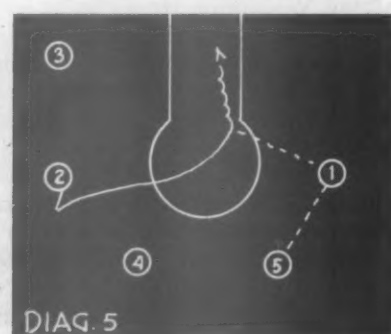
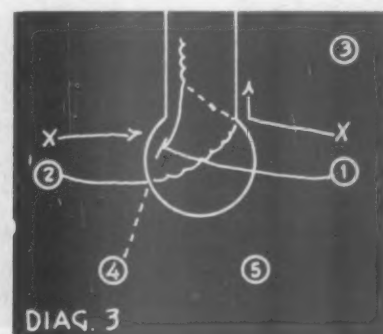
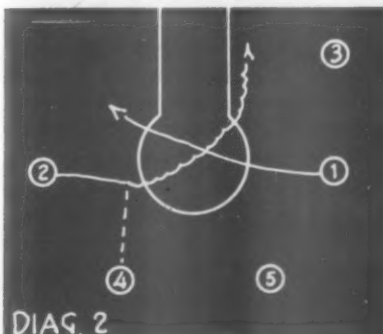
Also, we believe that with the free throw lane open, the guards will have more of a tendency to drive through. Further, this threat strengthens the offense. By placing our forwards away from the free throw lane there is less danger of the defense stopping the guards' quick thrusts by sloughing off.

The forwards have the opportunity of utilizing the natural screens or free-lancing in an attempt to get away

together and they will work as a unit.

In the first group, the forwards practice their weave and time their cuts to set up running screens. Diagram 2 shows the most simple screen. 01 cuts in his normal path. As he does, 02 breaks quickly and uses 01 or his defensive man as a screen. If 04 has the ball, 02 will usually receive the pass before the screen is set. If 05 has the ball, 02 will receive the ball after a player has screened for him. If the timing by 02 is correct, 01 will not have to stop but he

(Continued on page 57)



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Publisher

The Changing Sport Scene

FOUR years ago this month we pointed out what we considered to be a very decided trend in regard to the seasons for the various scholastic sports. At that time we mentioned the fact that in our high school playing days the first league basketball game was played on the Friday that Christmas vacation started. Nowadays the same high school has played three or four league games by that date.

Each year in our April issue we carry the results of the state basketball tournaments. Although our closing date has been advanced a week, we are able to include information from all but three of the states. A few years ago this figure was considerably larger, indicating that the states have advanced their tournaments.

In the editorial four years ago we posed the question whether the advancing sport seasons were responsible for the great revival of scholastic baseball and the vastly improved track and field performances.

Mr. Cliff Fagan, the highly competent secretary of the Wisconsin Interscholastic Athletic Association, discussed in the state bulletin the dangers in advancing the football season. Some of these views are so sound that we would like to mention them here. Wisconsin regulations call for the conclusion of the season before November 30 and there must be at least fourteen days of individual practice before the first game. Mr. Fagan says: "Frequently, practices start so early as to be to the disadvantage of the players, the coach, and to the discredit of the sport. Football is a fall rather than a summer activity. It should be practiced and played during

the fall months. The professional influence on the football season has made it encroach on the summer time. The professionals, in order to make their business a paying one, have found it necessary to play an extremely extensive schedule, often in the neighborhood of twenty games. This long schedule necessitates the starting of the professional season during the summer months and many of our high schools have begun to follow this practice."

Four years ago we raised the question of the influence of the professionals on the earlier scholastic sport schedules when we said: "Has the earlier start of various sport seasons been prompted by the same trend in professional sports? In other words, have professional football games in August turned the minds of the sporting public from baseball to football? With the professional hockey and professional basketball seasons underway by October 19, does the sporting public begin to think of indoor and the so-called sports of the winter season?"

Mr. Fagan objects to the too early start of football for a number of reasons which we should like to repeat. "The weather is generally too warm in the first and second weeks of August for football practice. This very early practice requires boys and coaches to give up summer jobs and the resulting wages."

"When football practice starts too early in the season many boys attend irregularly and as a result are not properly conditioned for early games." Mr. Fagan points out a rather vicious practice that exists. Schools, in order to get the jump on opponents, have been starting practice earlier and earlier, and this has resulted in games being played earlier and earlier, with the result that games are being played before school opens. Mr. Fagan says: "Interscholastic football is a part of the school program and should be for all of the students. Games should be scheduled so they are played only after school has begun and students are enrolled."

A number of states guard against this evil by specifying the date on which practice can start. Almost all states specify the number of days of practice required before playing the first game.

We agree wholeheartedly with Mr. Fagan that football should be a fall sport and not a summer sport. We personally feel that an eight-game schedule is long enough for high school players particularly when the great number of colleges limit their schedules to nine games. We also feel that not too many sections of the country are affected by severe weather before the middle of November. This year, with five week ends in October, an eight-game schedule would require but two week ends in September and the first week end in November. If two weeks of practice is ample, practice need not start before the last week of August. Certainly there is no excuse for games in August.

(Continued on page 63)



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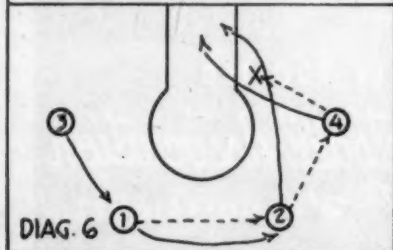
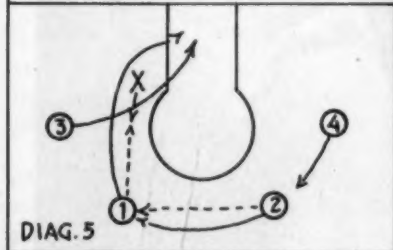
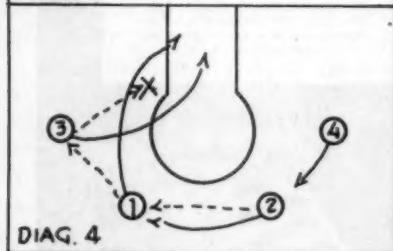
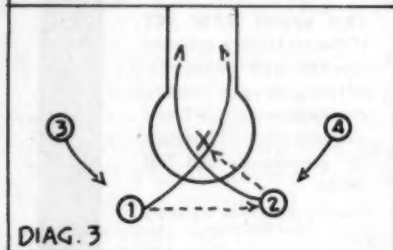
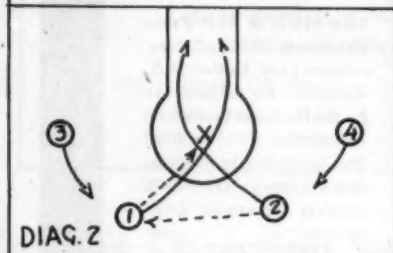
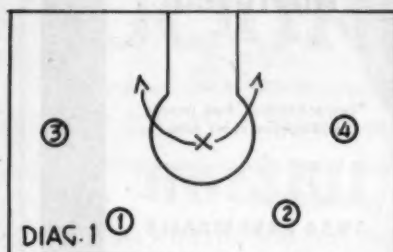
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A Simple Man-for-Man Scissors

By GORDON VAN BUREN

Basketball Coach, Schodack Central School, Castleton-on-Hudson, New York



THIS article will discuss a simple scissors offense against the man-for-man defensive setup. By keeping the offensive men planted or semi-stationary, as is shown in Diagram 1, until the ball is passed into the pivot man, this offense avoids much of the confusion often experienced by younger players, yet gives them a basic offense and the basic fundamental plays necessary for future play.

There are eight basic setups and from each one there are five possibilities: 1. The pivot man may pass off to the first man cutting. 2. The pivot man may pass off to the second man cutting. 3. The pivot man may pivot and shoot. 4. The pivot man may pivot and drive in behind the second man cutting for a lay-up shot. 5. The pivot man may pass out to a back guard for a set shot.

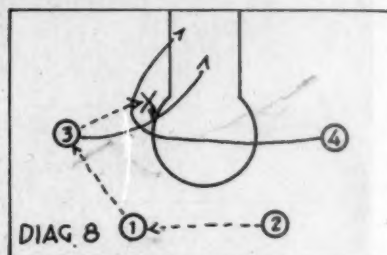
In all of the basic setups the first man to pass into the pivot man is the first one to cut. The forward and guard on the same side of the court always split the pivot together. The pivot man always plays the side of the keyhole where the ball is.

Diagram 1 shows our basic pattern. X is the pivot man.

Diagram 2 shows 01 passing into the pivot and cutting first. Then 02 cuts off 01's tail. 03 and 04 drop to the back court for defensive balance. The five possibilities mentioned earlier are now open to the pivot man.

In the play, which is shown in Diagram 3, 02 passes into the pivot and cuts first. Then 01 cuts off 02's tail. 03 and 04 drop to the back court for defensive balance. Now, the five possibilities are open to the pivot man.

Diagram 4 shows a play in which 03 passes into the pivot and cuts first. Then 01 cuts off 03's tail. 02 moves over in the back court to take 01's place and 04 moves out in 02's place. The five possibilities are now open to the pivot man. Now, the



pivot man is stationed on 03's side of the keyhole.

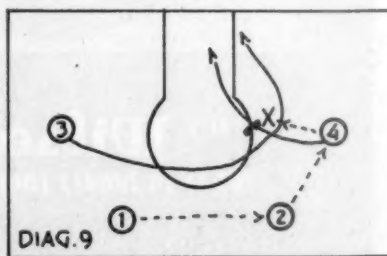
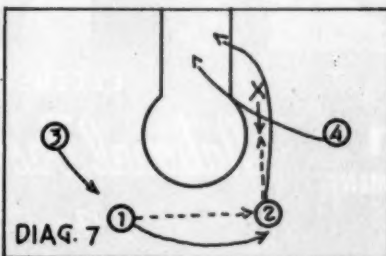
In the play, which is shown in Diagram 5, 01 passes into the pivot who is now stationed on 03's side of the keyhole. 01 cuts first. Then 03 cuts off 01's tail. 02 moves over in the back court to take 01's place and 04 moves out to take 02's position. Now, the five possibilities are open to the pivot man.

Diagram 6 shows a play in which 04 passes into the pivot and cuts first. Then 02 cuts off 04's tail. 01 moves over in the back court to take 02's place and 03 moves out in 01's position. The five possibilities are now open to the pivot man. Now, the pivot man is stationed on 04's side of the keyhole.

In the play, which is shown in Diagram 7, 02 passes into the pivot and cuts first. Then 04 cuts off 02's tail. 01 moves over in the back court to take 02's place and 03 moves out in 01's position. The five possibilities are now open to the pivot man.

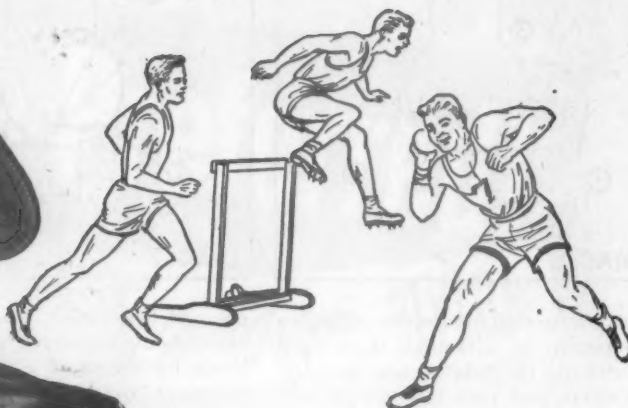
Diagram 8 shows a play in which 03 passes into the pivot and cuts first, followed by 04, cutting around the opposite side. The five possibilities are now open to the pivot man.

In the play, which is shown in Diagram 9, 04 passes into the pivot and cuts first, followed by 03, cutting around the opposite side. Now, the five possibilities are open to the pivot man.





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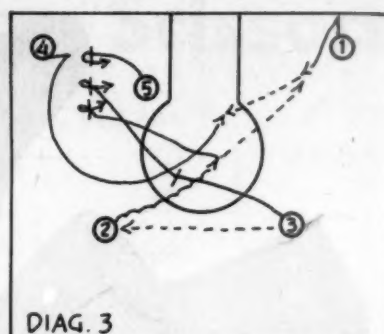
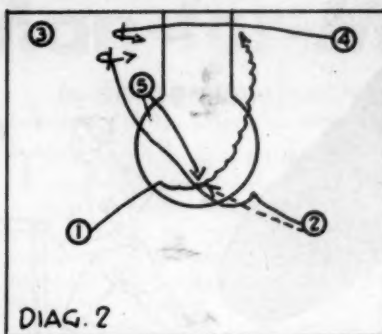
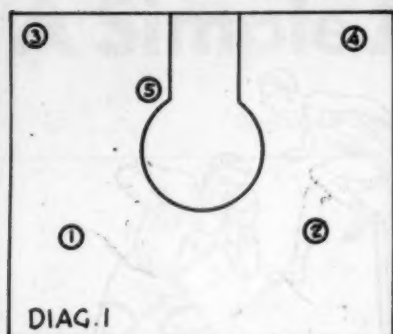
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ONE object of an effective offensive pattern in basketball is to keep the defense off balance and wondering where and how the offense will strike.

We have taken three separate offensive patterns and incorporated them into one flexible offense. The players learn the split post, gang screen, and continuity patterns in that order. Each pattern is taught separately at the beginning, and then integrated into one unit. Our boys seem to enjoy the deception involved in the patterns and learning takes little time.

Taken separately, these three patterns are effective enough for a short time, and perhaps for an entire game against certain opposition, but eventually a good defense learns to catch up with the offense. Grouped into one pattern, they are difficult for a defense to follow.

We feel that our particular system of offense enables the players to keep the defense out of step most of the time. Actually, it is a form of ball control, but not the slow and uninteresting type that bores spectators. Our system is built around the hypothesis that for us to score consistently we must do away with all wild and aimless shooting and take only shots which we feel will result in scores. Our system does not require a great deal of time in setting up the shot because opportunities for open shots are always presenting themselves. If one part of the unit does not open up a clear shot, the offense merely moves unobtrusively into another. The defense gets no tip-off as to when we will change.

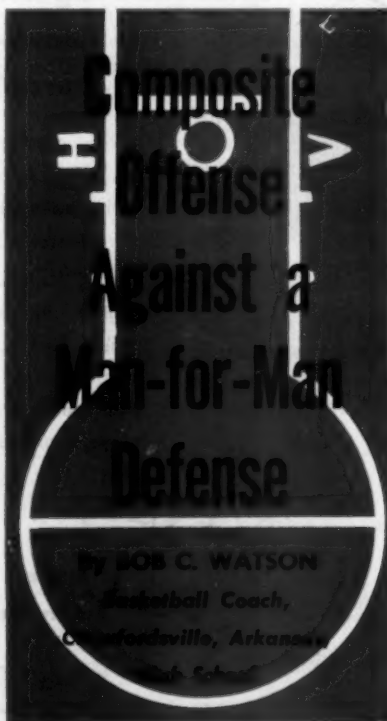
Statistics which have been compiled over the 1950-51 and 1951-52 seasons on shooting averages seem to justify our using this system. Using the identical patterns at two other schools, with boys of under average height, our teams achieved field goal shooting averages of .385 and .392.

Another strong point in favor of this system concerns the democratic

principles involved. No boy suffers due to being frozen out of the offense. Never have we had a boy show temperament because he was not allowed

BOB WATSON lettered in basketball at Arkansas State College, graduating in 1950. This is Watson's fourth year of coaching. All of this time has been spent in Arkansas schools. His teams have won two county championships and one district title. Watson is also football coach.

to shoot enough in a game. Allowing statistics to work for us, again referring to the past two seasons, we found that the five starters the first year attempted 190, 183, 183, 175, and 167



field goals, and during the second year the regulars attempted 251, 239, 228, 219, and 194 shots. These figures lead us to believe very strongly that everyone gets into the offensive act.

The Split Post

Against a man-for-man defense we usually open with the idea of running our split post and gang screen patterns, with two men out and three in, as is shown in Diagram 1.

The operation of the split post pattern is shown in Diagram 2. 02 starts the play by passing into the post to 05 who sets up at the top of the free throw circle. 02 fakes to the right, drives by the post, and continues to the corner to set up a rolling screen on the defensive man of 03. When 02 makes the first pass, 04 immediately moves laterally across the end line to complete the double screen on 03's defensive man. 01 fakes to the left, and then follows off of 02's heels in an attempt to rub his man off on the post. Should he shake his man, 01 will be given a hand-off by 05 and he should have an unmolested lay-up. 03 waits for his double screen to form and then moves to the top of the free throw circle for either defensive balance or to be ready for a pass from 01 who may be stopped from going in to the basket. 05 has the opportunity of utilizing other options such as pivoting and driving, pivoting and shooting, or handing off to 03 as he swings to the top of the circle.

The Gang Screen

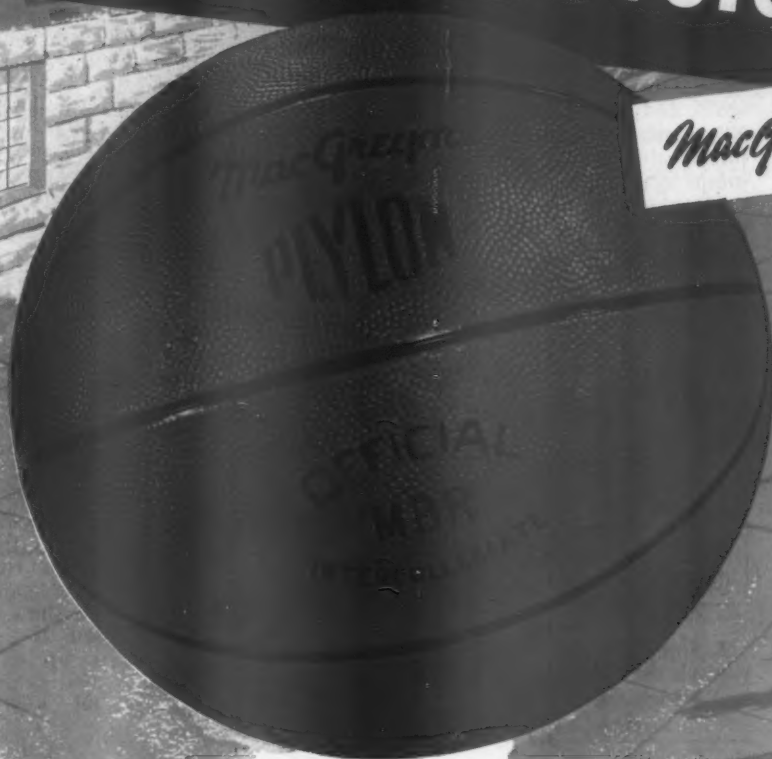
Should the split post run its course, with no one getting an open shot, only a minimum of movement is necessary to switch to the gang screen pattern which starts with no verbal or visual tip-off signals (Diagram 3).

03 passes to 02 to start the play. Then 03 sets up a rolling screen on the defensive man of 02 and continues to the corner to set up a stationary

(Continued on page 56)

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Improve Your Rebounding

By T. K. AUWATER

Basketball Coach, Sand Creek, Michigan, High School

AFTER graduating from Illinois, T. K. Auwater coached in New York state while working toward his master's degree at Columbia. For the past nine years he coached football and basketball at Caledonia, Michigan, High School, where his basketball teams won better than 70 per cent of their games. Auwater moved to his present location this fall.

"THE team that controls the backboards will usually win." There are few basketball coaches who will not agree wholeheartedly with this axiom. We would like to give a hypothetical example to bring out more clearly how eight additional rebounds from each basket could mean eight points in the score of a game.

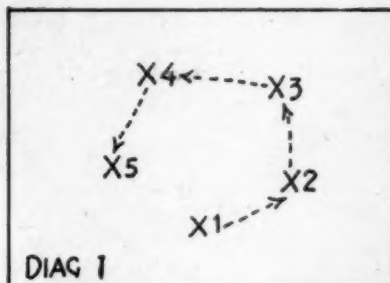
Supposing team A recovered eight additional rebounds from each backboard during a game. This team by its eight additional recoveries removes eight opportunities for team B to score. If both teams were making 25 per cent of their shots, two field goals would be eliminated from their score. Likewise, eight additional recoveries from the offensive backboard by team A would mean two field goals. Four points less for the opponents and four additional makes eight points in favor of the better rebounding team. Only four additional recoveries from each backboard would still add up to four points—a margin that is decisive in many games.

The suggestions which follow should improve a team's offensive and defensive rebounding. Good rebounders have the desire, agility, and techniques that are acquired only by practice. A portion of each practice should be devoted to rebounding and the coach should stress rebounding constantly in scrimmage and in games.

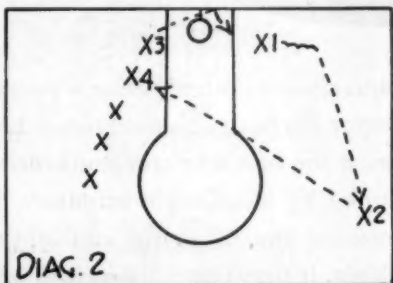
The first two suggestions are concerned with the physical improvements of the player's legs. Added height and the necessary endurance can be attained by rope skipping and ball tapping.

1. Rope Skipping. Each boy is given a rope and then the squad works together for about five minutes.

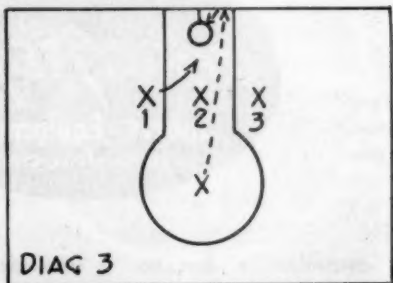
2. Ball Tapping. Five boys form a circle about fifteen feet in diameter (Diagram 1). X1 tosses the ball over his head similar to a jump ball. Then he leaps up and taps it back up again. On landing, X1 jumps quickly again and tips the ball high to X2. X2 maneuvers under the ball and jumps, then taps it up again. He jumps again and tips the ball to X3. Each player jumps twice and taps twice. The ball goes around the circle and the boys should be encouraged to move under the ball, not reach.



3. Individual Defensive Rebounding. In the drill shown in Diagram 2, X3 flips the ball so that it comes



off the basket or the far side of the backboard. X1 rebounds by going up high and then he passes out to X2



who passes to X4. X3 replaces X1 who takes X2's place. Then X2 goes to the end of the line. The other side of the backboard is worked by having the players line up on the other side.

Coaching Points: The coach should watch for two kinds of rebounds, delayed and immediate. In a delayed rebound, the ball momentarily touches the basket, while it shoots off the backboard in the immediate rebound. The guard should not leave the floor until he is sure the ball is coming down.

A rebounder must not get too close to the basket or the ball will go over his hands.

4. Individual Blocking Out. In this drill two players pair off and work together. One shoots while the other blocks out. After each rebound the players switch.

Coaching Points: The defensive player continues to watch the shooter after the ball is released. If the offensive player follows up to the guard's right, the defensive player pivots on his right foot. Thus, the guard is brought into a screening position in front of the shooter, facing the basket and watching for the rebound. If the shooter goes left, the defensive player pivots on his left foot.

When screening an offensive player, the guard should move slowly toward the basket. The guard moves slowly to prevent fouls and to be in a better position for the long rebounds. He can go in much easier than he can retreat. Some players have a tendency to brace immediately after pivoting and thrust their buttocks into the shooter, thus committing a foul.

The defensive player should time the rebound and go high for the ball.

5. Scrimmage. In our scrimmage drill we use three-on-three or five-on-five. With the defense in position the coach starts by shooting the ball against the backboard. All fouls should be called; otherwise, the defense will become careless.

Having considered conditioning and defensive rebounding, we will now take up offensive rebounding. The only offensive practice setup we use is a rather common one which is shown in Diagram 3. One player, with the ball, is on the free throw line.

(Continued on page 55)



Monte Irvin, brilliant New York Giant outfielder, credits Niagara in helping to prevent muscular atrophy while recuperating from the badly broken ankle he incurred in 1952 training.



Howard Waite of the Pitt Panthers finds he can supervise several massages at once through use of a battery of Niagara units.



Ralph Kiner knows the value of conditioning and proves it by using Niagara before and after playing.



Chuck Mather, Massillon (Ohio) football coach, has been an advocate of Niagara Massage as a conditioning aid for several years.

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Dr. Harrison J. Weaver, physician to the perennially first division St. Louis Cardinals, reports especially good results in the use of Niagara as an aid in the healing of fractures and certain minor, but painful and incapacitating, spinal injuries.

Howard Waite, Athletic Trainer for University of Pittsburgh, uses Niagara for the renaissance Pitt Panthers. "Niagara occupies an important place in my preparations for this tough one-platoon football," says Waite. "It's truly DEEP massage. It has unequalled value in helping to restore vital circulation to injured parts and aiding in the prevention of muscular atrophy."

Sam Kramer of Strong Vincent High School is representative of progressive high school coaches all over America who've made Niagara Massage part of their program for safeguarding young athletes. One example of Niagara's effectiveness especially impressed Coach Kramer. "A back had been plagued with a sore leg since August," he writes. "He could play less than half of every game. Niagara helped clear up his ailment. He was able to play his first game after

using your equipment."

Ralph Kiner takes conditioning seriously. That's why he became so enthusiastic about Niagara when introduced to it two years ago. That's why regular use of Niagara is now part of his pre- and post-game conditioning regimen.

Monte Irvin, the hard driving competitive outfielder of the New York Giants, suffered a broken ankle during the 1952 training season. Because Monte was in his 30's, many sports writers thought it meant the end to his career. His own tremendous determination to play again confounded them. We're proud that Monte credits Niagara DEEP Massage with a big assist in his return to professional baseball.

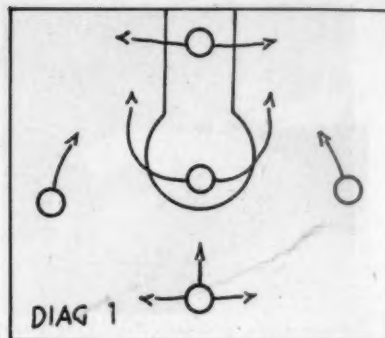
Chuck Mather coaches at Massillon High School. No one needs be reminded that Massillon is always at the top in high school football. Chuck Mather has used Niagara equipment for 3 years. He has conducted numerous experiments on Niagara's effectiveness against sprains, strains, cramps, contusions, muscular atrophy. The results? Coach Mather is sold on Niagara—recommends it to other coaches!

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By **HUGH GREER**
Head Basketball Coach, University of Connecticut
and
STAN WARD
Assistant Basketball Coach, University of Connecticut

Penetrating the Zone With the 1-3-1



NOW, when the various types of zone defense are finding renewed favor as a defensive measure by coaches at all levels in New England, it has become imperative for every coach to have an efficient zone offense in his repertoire. Here at the University of Connecticut, we have, after thorough experimentation, decided that the 1-3-1 offense is the most suitable for our plans against every type of zone. In fact, the 1-3-1 places such heavy pressure on the defense that the zone is practically forced into a man-for-man situation to contain the attack. Thus, the individual situations which the opposing coach originally tried to eliminate by employing the zone are created.

In setting up the 1-3-1, we examine the qualifications of our personnel carefully so that we may position our players correctly. In our opinion, the point man who is called a *quarterback* by most basketball strategists; and our middle or center man, who plays on and around the free throw line, are undoubtedly the most important players in our attack.

Prime requisites for the point man are that he be above average height, be a sharp, accurate passer, a fine defensive ball player, and possess good judgment so that he will retain his poise in any situation. Naturally, we want the point man to be a good set shot from the outside as well, but have found that the boy who is only a great shot, and does not have the other abilities will hurt the team in the long run rather than help it. From the nature of the position, the point man is usually not a heavy scorer, his main task being to act as the fulcrum of the attack. However, an outside threat certainly places additional pressure on the defense and prevents tightening or *pancaking* in the zone.

The center or middle man against the zone is not necessarily our normal center or tallest man. We are interested in a boy who has a good collection of feints, is very quick, and has the ability to spin and drive by the defensive man in either direction for lay-ups or to set up his hooks. In addition, he should possess a good jump or one-hand push from within the vicinity of the free throw line.

The side court men should be good set shots, fair drivers, and be able to constitute a threat to the defense with one-hand flips or jumps from the upper key. Ability to pass into the post man is also important since a great deal of our passing to the inside of the zone is done by the side men who have a far better angle for entry than the point man.

The deep man is usually our tallest boy and best rebounder. His main task is that of a decoy and most of his points are gained by his own efforts under the boards unless the defense drifts out and he can be reached with good percentage passes.

Our offensive setup is shown in Diagram 1, and the general cut movement of each player is shown by the arrows. The cuts are determined by the position of the ball and the movement of the defense. These cuts differ from a man-for-man cut, due to the fact that we are seeking open spaces or avenues in the zone and are not simply trying to shake a man loose

from his guard. Once a coach has indoctrinated his players to be alert at all times for these spaces, especially those away from the ball, he has the basis for a good zone offense.

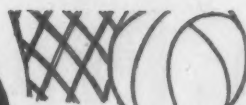
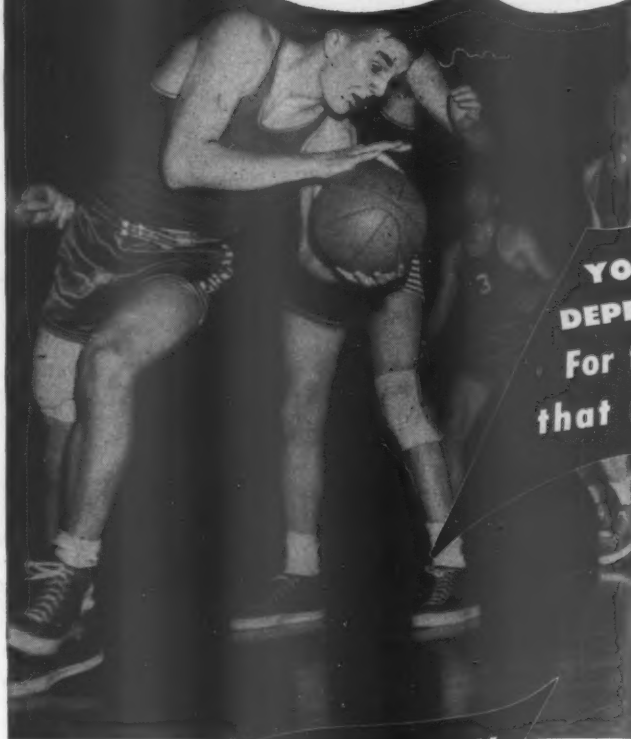
We try to acquaint each player with the possibilities that his position offers and try to orient him against making the simple mistakes that may hurt our offensive tactics. For instance, it is impressed on the point man that there should be a minimum of dribbling since it gives the zone time to adjust. Although the point man should always be alert for opportunities to split the front line, he must remember that he should normally play outside far enough so that the apex of the triangle is maintained, and the ball can be kept moving without dribbling. Playing outside is important because too many point men constantly place pressure on the front line men until they are packed into the head of the circle or deeper. Once this is done, one of the most potent offensive threats has been neutralized, that is the post man on the free throw line. Finally, we ask the point man to remember that it is best to pass on angles. Thus, entry inside the zone is usually made more effectively from the side.

Once the ball enters the side, we begin our cuts (Diagram 2). The point man moves over a few steps in order to be in position for an outlet pass if necessary. Our post man, 03, makes his hairpin cut to a fairly deep pivot. 04, timing the cut, moves into the vicinity vacated by 03. 05 generally moves away from the ball in order to clear out if either 02 or 03 wish to drive and also to complete the coverage of the offensive board. However, other possibilities are used from this same setup. 04 may cut deep, if he finds the space open, and

(Continued on page 50)

HUGH GREER is head basketball coach at Connecticut and Stan Ward is his assistant. The two collaborated on the "Hugh Stan Manual of Basketball Statistics." Ward coached for seven years at Suffolk Academy before joining the university staff a year ago.

"A FLOOR THAT I KNOW I CAN
STOP ON IS LIKE STARTING
THE GAME WITH 10 POINTS"



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The Pressing Defense

AT Wauwatosa we have had outstanding success with the pressing defense. If our material is suitable, we will use it exclusively as we did during the 1947-48 season when we won the Wisconsin state tournament. Our style of defense slowed down our opponents' offense and tried to make them make bad passes. I drilled my players to be alert and on their toes and to take all kinds of chances on interceptions.

The interesting thing about this style of pressing defense is that it makes your opponents play your style of game.

Our object is to score by quick-break tactics. As soon as the ball is lost we rush our opponents, but above all, we never try to make unnecessary fouls. If an opponent is going to get by his guard we let him go and rely on shifting and the out-manuevered man making a recovery on another man. This is probably the predicament which causes most unnecessary fouls. The pressing tactics are used after unsuccessful or successful shots, held balls, or free throws. Following an out-of-bounds under the basket we are defending, we retreat and congest the basket area. Then, when the ball is passed in, we pick up our man. This maneuver stops out-of-bounds screen plays. The opponents may make long shots but we gamble on this type of a shot.

What does it take to play this style of game? I think the first requirement is good personnel. In our most successful season with this style we had a starting five who averaged 187 lbs. Besides being heavy and rugged they were blessed with a tremendous amount of speed. The will to win was always predominant. In addition to this all the boys could shoot. In three of our games they averaged over .420.

The second requirement is conditioning. Our main conditioning exercise is running. Each boy has to run a mile every evening. Along with this we use a three-man crisscross up and down the floor until the players are nearly exhausted. As the season progresses they can do these drills for increasingly longer periods. A lot of leg exercises are given with special emphasis on rope skipping. The players must have good legs to play a

By **BILL WALTERS**

Basketball Coach

Wauwatosa, Wisc., High School

fast game of basketball. Our practices are filled almost exclusively with fundamental drills related to our various styles of play. The practice is never allowed to drag and I try to instill pep into everything we practice. I want the players to extend themselves at all times.

Our set-up consists of playing a zone over the entire floor and then going into a man-for-man defense once the ball is across the ten-second line. We never cover the man who takes the ball out of bounds. Our extra man doubles-up on the other man or tries to anticipate the pass for an interception.

One forward is designated as our offensive man. He takes all kinds of

BILL WALTERS coached at Marshall High School in Illinois following his graduation from Illinois State Normal College, DeKalb, Illinois. Walters is starting his eleventh basketball season at Wauwatosa. In that time his teams have compiled an outstanding won and lost record, winning the state tournament in 1948.

chances and many times his man will have to be checked by another man. At the same time, he is in good offensive position for a fast break or a long pass and a dribble in. Many times he will break for the basket when the opponents shoot and gamble that we will get the rebound.

The other forward will be more cautious and not take too many chances. These two men play the ball hard on a rebound or recovery by the opponents.

One guard and the center play around the ten-second line or chase their man wherever he plays. It is their duty to play in such a position to cut-off long passes. This is quite effective when the opponents attempt to bring the ball up the floor with

only two men.

The other guard returns to the free-throw line the instant we lose the ball. This man playing what I call "in the hole" on defense must be able to rebound and turn and hook or throw a baseball pass the length of the floor. His peripheral vision must be good so that he can form a mental picture of the floor at an instant. He must know how to play two-on-one and be able to jockey them so as to stop all "crip" shots. Everyone on the squad is drilled on "two-on-one" because in our style of play it is used often.

I do not use this defense every year as the personnel of the squad will vary the style of play. Our assistant coaches all train their young players to press constantly. In this way they soon learn how to guard because their mistakes are so apparent. This style of play instills pep in a squad. The boys are constantly driving and forcing and are never back on their heels. The habit of being aggressive is developed by the players and carried into all of our practice sessions.

The question might arise as to how we can play this style of game and not foul out. Any boy who has good basketball sense, good stance, the ability to move his feet well and a lot of determination can play a whole game without fouling out. The players, of course, will pick up more fouls than if they were playing a waiting game on defense.

We use the same style of defense to break up a stalling game. That is, we have a man in the "hole" on defense to stop "sleepers" and have the other four men chase and double-up on the man with the ball. It has proved very effective.

Some of the abilities necessary to play a good pressing game are: quick reflex action; the ability to anticipate and to be a ball hawk on loose balls; spirit; self-confidence; alertness for interceptions; the ability to shift; good guarding techniques; rebounding ability, and good peripheral vision.

It is to be expected that the quick-break will be slowed down at times. When this occurs, we use a four-man mill with a man on the free-throw line.



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Playing the Offense

By **EDWIN J. BECKMAN**
Basketball Coach, Key West, Florida, High School

A basketball team's success depends upon the strength of its offense. It does not matter how good a defense it may have, if a team does not have the ability to score baskets it cannot win games. True, basketball games are won when players have exceptional luck at shooting baskets from all parts of the floor, but these occasions are rare. The team that can by its teamwork get the ball down the floor to within good shooting distance is the one that will head the percentage column.

There are many different styles of offense in basketball. Yet, if a close analysis of all these were made, the same fundamental principles would be found for all.

Possession of the ball is almost nine-tenths of a basketball game, and the sooner the ball is obtained the better. When a team has possession of the ball its players should be on the move continuously. Players in motion are unconsciously making openings for their teammates.

The second big factor is the speed with which the offense is started. It must be fast and get underway before the opposition has a chance to size up the situation. After a team secures possession of the ball, getting it down the floor to within shooting distance is the object and there is no excuse for wasting time. On outside balls the players ought to hurry the ball into the court. It is not a rest period. Most teams will be swept off their feet by a combination trained to snap the ball into play quickly from outside territory.

In getting the ball down the court quickly the players should not go down the floor in a wild dash. The first and best means of advancing the ball down the floor is by short passing. When a player wishes to make a pass from scrimmage to his teammates going down the floor, it is suggested that he waste no time looking for faces but he should throw to a man who is wearing the same color shirt that all his teammates are wearing.

When a team takes possession of the ball it should get moving, passing the ball speedily and accurately, criss-

crossing in order to make openings. Should any player cut loose and make a dash for the basket his teammates should be ready, if they have the ball, to feed him with an accurate pass. It is the business of the man with the ball to be alert to feed a man who is cutting in. A sudden call by the cutter will help the feeder to determine immediately just what he should do with the ball.

After making a pass to a teammate, the player should immediately glance to the sides of the court to find an opening into which to rush. If one member of a team has the ball on the right side of the court, the others ought to shift over to the left side, in

ED BECKMAN wrote an article for us last year which was reprinted in the 1952-53 edition of the "Coaches Digest." He literally grew up with basketball, his father being Johnny Beckman of the original Celtics. Before coming to Key West High School, Beckman coached all sports at the Canal Zone Junior College, winning championships in football, basketball, and baseball. He has his M.A. from New York University and is currently working on his doctor's degree at the same institution.

order that one guard cannot cover two players in the same zone. This is impossible if they spread out.

Dribbling is often overdone. Dribbling should be used as a means of advancing the ball down the court as a substitute for passing.

If a man who has the ball finds his opposing guard is waiting for him under his basket and he is somewhere around the center of the court, he may start off on a dribble if none of his teammates are in front of him. During the course of this dribble he should be ready to come to a halt and feed one of his teammates who may be coming down the floor at a fast pace. If he should overlook his mate by continuing the dribble, the chances

are that he will lose an opportunity to score a basket, and, secondly, he is apt to cause ill-feeling among his teammates because he is stressing individual play instead of teamwork.

The best time for dribbling is when a player receives a pass from one of his teammates while he is going under the basket, assuming that he is ahead of his guard when he is cutting in. He should not try to dribble by a man who is standing right in front of him. If the guard knows his business, he can slap the ball away without any trouble.

When a player is dribbling he should not look at the ball. If a player looks ahead instead of concentrating his attention on the ball he will be able to evade his opponents; he will not lose time; and he will avoid overlooking some of his men who are cutting in for the basket. A man dribbling down the floor should not overlook another man who may be in front, cutting from the side.

A player should avoid dribbling high. If the dribbler keeps the ball about knee-high, with his palm fairly well over the ball as he advances, he is then controlling the ball at the proper height.

A player must pay special attention to catching the ball when it is passed to him instead of stretching his hand forward to meet the pass and starting the dribble immediately. He should catch the ball by tightening up every muscle in his forearm to expect a snappy pass although the ball may appear to be traveling toward him slowly. A player should not start to dribble before he catches the ball.

Another one of the important things in basketball offense is for players to break and run at the proper time. When the ball is moving about they ought to glance out of the corners of their eyes to see whether the opportunity presents itself for them to cut for the basket. The trouble with many boys is that they have their eyes glued on the ball all of the time. But they will never get away if they are not constantly prepared or do not have the thought of cutting in.

(Continued on page 49)

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USS

ABC's of Sports Publicity

By AL BOECK, Jr.

Director of Public Relations, State University of New York, Upstate Medical Center

BECAUSE of the persistent enthusiasm of sports fans, newspaper and radio sports editors are usually the most accessible of all media department heads when it comes to placing news about school activities.

A woman scorned is nothing compared to the fury which drops on the sports writer who leaves out a score or makes an error of .3 when publishing scoring averages. Weeks after such oversights, he continues to hear biting remarks about his weaknesses in covering sports.

This intense pressure on the part of loyal fans is an important factor to the coach because it sets up a situation where the sports editor is eager to get all the help he can in satisfying the fans.

Having established that the area papers and radio stations really want to use a school's scores and game stories, and that they need the help of the publicity director or coach to do it right, the question becomes one of what the coach or publicity director should do to carry out his part in the program.

There are five basic functions that a publicity-wise coach, or his publicity director must perform. These are: 1. Prepare a dope sheet. 2. 'Phone in scores. 3. Keep statistics. 4. Supplement the dope sheet with spot news and feature stories. 5. Provide pictures and/or mats.

Any school, regardless of how small its budget, can afford a dope sheet adequate to meet the needs of the sports writers. A dope sheet is simply a reference file on the team. It can be run off on a mimeograph machine or printed, depending on the money available, but as long as it contains the vital information one is as good as the other.

Ideally, these fact files ought to be in the hands of the sports reporters before the season opens. Thus, the reporters are able to become acquainted with the players, the schedule, and the overall prospects for the season. It also permits them to talk with the coach in order to check any points of particular interest to him. Timeliness is important.

The sports reporter should find the following information in the dope sheet:

1. *Schedule:* Date, name of oppon-

ent, place of game, anything unusual about it, such as more or fewer games, and new opponents.

2. *General Information About the School:* Colors, nickname, conference, names and telephone numbers of people in athletic department, and the location of the game site.

3. *Squad Roster:* Complete names, weight, height, age, year in school, and number on jersey.

4. *Conference:* Other members, conference winner last year, the team's standing last year.

5. *Personals on Coaches:* Personal achievements as an athlete, coaching experience, and record.

6. *Personals on Squad:* Experience, letters won, special abilities, players to watch during the season, and any predictions.

7. Lettermen lost from last year.

8. *Feature Material:* Human interest items, brother combinations, son of a previous star athlete, special games, such as homecoming or traditional matches for trophies, etc.

A dope sheet of this type will answer countless questions for the sports writer and provide him with a reference to keep at hand while writing about a team. He can make notes in it from his own observations and thus make it a personal tool.

These sheets should be distributed to all local media, to the newspapers and radio stations in the opponents' towns, media in each player's home town, and the press services. The campus paper at each school should not be neglected.

The second service to the newspapers is the telephoning in of scores. Editors should be consulted before the season opens to find out when they want the call (afternoon papers frequently do not want night scores until morning), how to call (prepaid or collect), and what to call. Editors in other towns may want just the score, others, closer to and at home, may want box scores and a review of the game. Wire services, such as the Associated Press, usually have arrangements with the local newspaper for coverage. Coaches often use the team manager or a student publicity agent to help in giving post-game coverage.

Although they are a headache in any area, statistics are of tremendous

importance in athletics. Rapid and accurate computations are necessary to provide up-to-the minute averages after each game. Should there be a tight scoring race between two players, or should one player approach a scoring record, the cries for fresh figures after each game will resound through the office of the sports editor.

The best way to handle statistics is for each coach to work out a system for himself or borrow one from the local paper, and keep a set of running statistics so he can see at a glance just what all the averages are. Each sport will dictate its own set of statistics. Basketball, for example, will call for each player's average in shooting field goals, free throws, free throws attempted, points per game, and fouls. This is the type of material which fills out a radio broadcast during the lulls or stretches a newspaper account of a game.

In the spot news and feature story categories are all the countless and unpredictable things which come up during a season. All media must be kept informed of any changes in the dope sheet data, such as changes in schedules, and players dropped or added to the traveling squad. As the season unfolds, special releases can go out if high scorers develop or records are set.

Last on the list is pictorial coverage. If it is financially possible, a supply of photos of the key players, the coach, and a squad shot should be ordered. These photos can be distributed during the season to dress up stories about the team. If a coach or publicity director cannot provide the picture himself perhaps he can persuade some of the most interested papers to take some for their own use.

This five-point service schedule can well be expanded by dispatching a pre-game story before each game. It is really necessary as far as the media in the opponent's area are concerned. It enables these sports writers to give due notice to forthcoming games by describing the two teams and by comparing their records.

A final touch to the season's publicity operation might be a summary and a story on player honors and letter winners.

All of this information is used to

(Continued on page 39)

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33

Psychology— Its Role in Physical Education

By STANLEY E. SMITH

IT was once believed that the mind and body were unrelated and independent parts of man. Educators of that day thought that each part should be influenced separately, and no one would have considered that the response of one part might have consequences upon the other. The curriculum included those activities which were strictly intellectual in nature and others which were supposed to be exclusively physical.

Today our concept of man is entirely different. We know that he must be considered as an integral unit. The whole is more than merely the sum of the parts. It is difficult to conceive of one part reacting to a stimulus without affecting other parts. In every act that man performs, therefore, there is more than the physical aspect to consider. The psychological implications of such an act may be of very great importance.

In spite of the acceptance by psychologists of the concept of the fundamental unity of man, many educators have been slow to incorporate it into their basic philosophy of education. Many accept it in principle, but not in practice. They still adhere to the traditional concept of the gymnasium being the place to exercise the muscles, and the classroom the place to exercise the brain. Perhaps the fault lies in their inability to connect the philosophical idea with the practical situation. A brief view of some of the more obvious connections between the fields of physical education and psychology may serve to give them a more realistic orientation.

The term *physical education* is not meant to be interpreted as education of the *physical*. Rather, it is intended to mean education of the total organism through systematically planned physical activities. Too often this is misunderstood by the layman, and its correct definition is very often forgotten or neglected by those in the teaching profession. It is perhaps unfortunate that in several European countries the term *gymnasium* is used in reference to this program, since it would seem to be a rather narrow connotation for a subject so broad in perspective.

Certainly it is one of the objectives of the physical education program to increase physical skill and organic strength, but it must not be assumed that this is the only objective, or, in some instances, even the most important one. In fact, its importance as a means of attaining other objectives beyond the realm of motor ability may far surpass its importance as an objective per se. Take, for example, the case of a boy whose social environment is such that his acceptance into the group depends to a large extent upon his skill in playing a certain game. It is easy to see how, without that skill, his personality development may be retarded or hindered.

Psychologists have long recognized the importance of play activities in the personality development of children. It is through these activities that the first real social contracts are made, and the principle medium through which subsequent social development is fostered. Properly supervised games, with their ever-changing situations and opportunities for expression of initiative, can do much to develop adjustable attitudes and promote social confidence. On the other hand, poorly administered play activities can have an adverse effect on the molding of desirable personality patterns.

In the planning of the present-day physical education curriculum, therefore, the role of the psychologist is of great importance. Such questions as "What types of activities are best suited to promote beneficial social traits among ten-year olds?" "At what age, if any, are coeducational activities desirable?", "What is the most efficient method of teaching gymnastics, or highly organized games?" are ones which the ordinary teacher, because of lack of training or of time, is often unable to answer. Psychologists, however, have been able to study these and other problems in detail, and have supplied information of great practical value.

The psychological needs and characteristics of the students are among the most important considerations in the construction of the modern curriculum. These are examined and set forth by the psychologist and the phy-

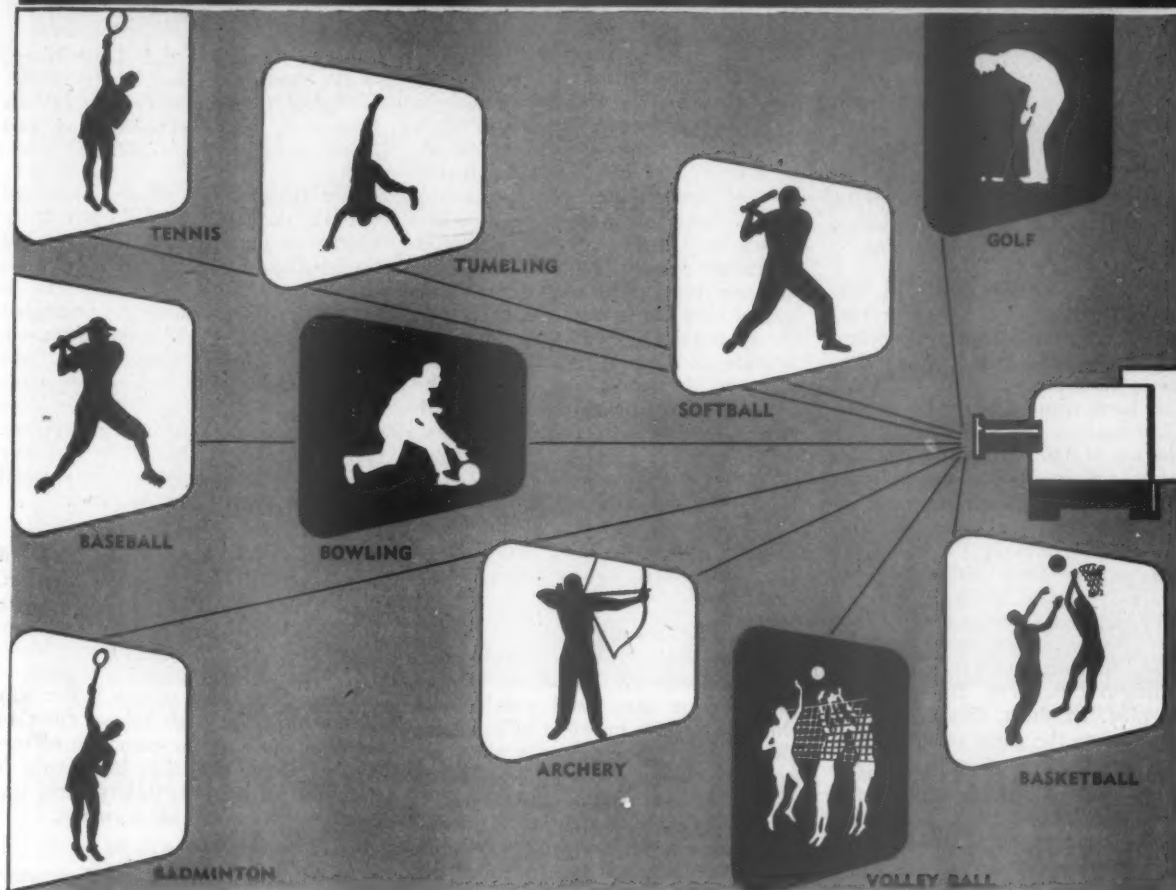
sical educator adapts the curriculum to suit them. Since the needs and characteristics of the students will differ with respect to age, sex, environment, and other factors, a program which is suitable for one group is not necessarily the best for another. Older students, for instance, will need activities which are more highly organized than those intended for the younger ones in order to stimulate their interest. They will also require activities which are physically challenging, especially at the age when self-assertion and desire for recognition are important psychological drives.

In teaching games and gymnastics, the physical educator, either consciously or unconsciously, makes use of the principles of learning which the psychologists have defined. He employs the part and whole methods of learning where one or the other, or the proper combination of both, seem likely to produce the most effective results. He can observe for himself the efficacy of distributed practice and the law of exercise. In many cases physical educators have made valuable contributions to the body of psychological knowledge through their experience and experiments with motor learning.

They have also rendered assistance on problems connected with personality development. In certain cases, one can actually see the progress made in the development of initiative through games. Recognition of the qualities which tend to indicate potential leadership abilities is also made easier through physical activities. The physical education teacher actually has a better opportunity than any other teacher to observe these and other aspects of social growth. To begin with, the playground (or gymnasium) is an ideal laboratory for observing human behavior. Here inhibitions tend to be weaker and motivations stronger than in the classroom. In addition, the physical education teacher has contact with his students over a period of several years and sees their reactions in many varied circumstances, and under continually

(Continued on page 39)

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NEW BOOKS

Table Tennis Illustrated, by Douglas Cartland. Published by A. S. Barnes & Co., New York 16, N. Y. Ninety-six pages. Price \$1.75.

This book is one of the popular Barnes Sports Library books and follows the usual pattern of being concise, well organized, and beautifully illustrated. It is a valuable addition to the school athletic library.

How to Improve Your Softball. Published by The Athletic Institute, Chicago 4, Ill. One hundred and twenty pages, paper bound. Price 50 cents.

This book, like the others in The Athletic Institute's "How to" series, is taken from the sports slidefilms which are produced at cost by The Athletic Institute.

The book contains very little reading but teaches the game of softball by the use of 346 beautifully executed pictures. All schools have softball and we feel all schools should have a number of copies of this book on a table in the library. Among the items discussed are: the game, the game's history, the overhand, sidearm, and underhand throws, fielding ground balls and fly balls, hitting, bunting, base-running, sliding, the windmill pitch, the slingshot delivery, and defensive team play. In short, this book thoroughly covers the game of softball.

Modern Volleyball, by Curtis Ray Emery. Published by The Macmillan Co., New York 11, N. Y. One hundred and forty-four pages. Price \$2.75.

The author, a member of the physical education staff at LSU, has prepared the first complete coverage of the advanced style of this game. The book covers the game from the fundamental techniques to precision plays with practical pointers for coaches and players alike. Interestingly enough, it is estimated that some 50,000,000 people participate in the sport of volleyball each year.

Sports in American Life, by Frederick W. Cozens and Florence S. Stumpf. Published by The University of Chicago Press, Chicago 37, Ill. Three hundred sixty-six pages. Price \$5.00.

The authors, both from the University of California, have traced the development and history of sports and competitive games not only from

the historical aspect, but from the sociological aspect as well. Few, if any books, have ever made as stirring a defense of competitive sports as is to be found throughout this classic. We should like to quote the concluding paragraph of the book.

"The democratizing influence of spectator sports in American culture can scarcely be overestimated. In furnishing a common cultural interest, fostering understanding across class lines, and increasing the intimacy of association with different classes, spectator sports have contributed to those integrating forces which are vital and indispensable in the preservation of our democratic way of life. The lowliest individual in the economic or social scale may participate with equal benefit and pleasure in the spectator sports. The bleachers are equally cordial to coal-miners, politicians, and bank presidents."

Finance Your Athletic Program, by George A. Katchmer. Published by Burgess Publishing Co., Minneapolis 15, Minn. Forty-nine large size pages. Price \$1.75

From the introduction of the book: "This book is primarily written as an aid to those schools whose athletic departments are faced yearly with the nightmarish problem of financing their athletic programs. In this category are classed the small class B and especially the majority of class C schools." George Katchmer is athletic director at Newport, Pennsylvania, High School, and has authored two articles for us in the past along the lines of this book. The author discusses numerous ways of raising money such as programs, class games, refreshment stands, scrap drives, movies, dances, shows, and the like. All in all, some thirty different money-raising schemes are discussed, with the author indicating approximately how much can be realized from each one. Even larger schools will find the contents of the book exceedingly helpful.

The Story of Pro Football, by Howard Roberts. Published by Rand McNally & Co., Chicago 80, Ill. Three hundred and twenty-five pages. Price \$4.95.

The book is filled with behind the scenes anecdotes such as this one. "On another occasion Bobbie Cahn

strode right past Halas while pacing off a penalty against the Bears. George, deeply moved, shouted: 'Cahn, you stink!' Bobbie kept right on going for an additional 15 yards, then turned. 'How,' he shot back, 'do I smell from here?' Howard Roberts is a sports writer on the *Chicago Daily News* and the entire book displays his ability in the writing profession.

Applied Anatomy and Kinesiology, by Wilbur Bowen and Henry Stone. Published by Lea & Febiger, Philadelphia 6, Pa. Four hundred and sixty-two pages. Price \$5.50.

The first edition of this standard text was published in 1917 which indicates its popularity in that it has been widely used in physical education courses for 36 years. The book is a concise, interestingly presented study of the principal types of muscle exercise. Complex movements are analyzed into the simplest elements and the part played by the bone, joint or muscle involved in each movement is explained clearly. This superbly bound and printed book is illustrated with 261 pictures, 18 in color.

Football Rules Simplified, compiled and published by Frank R. Colucci, 1540 Smith St., Flint 4, Mich. One hundred and eleven large size mimeographed pages. Price \$1.10.

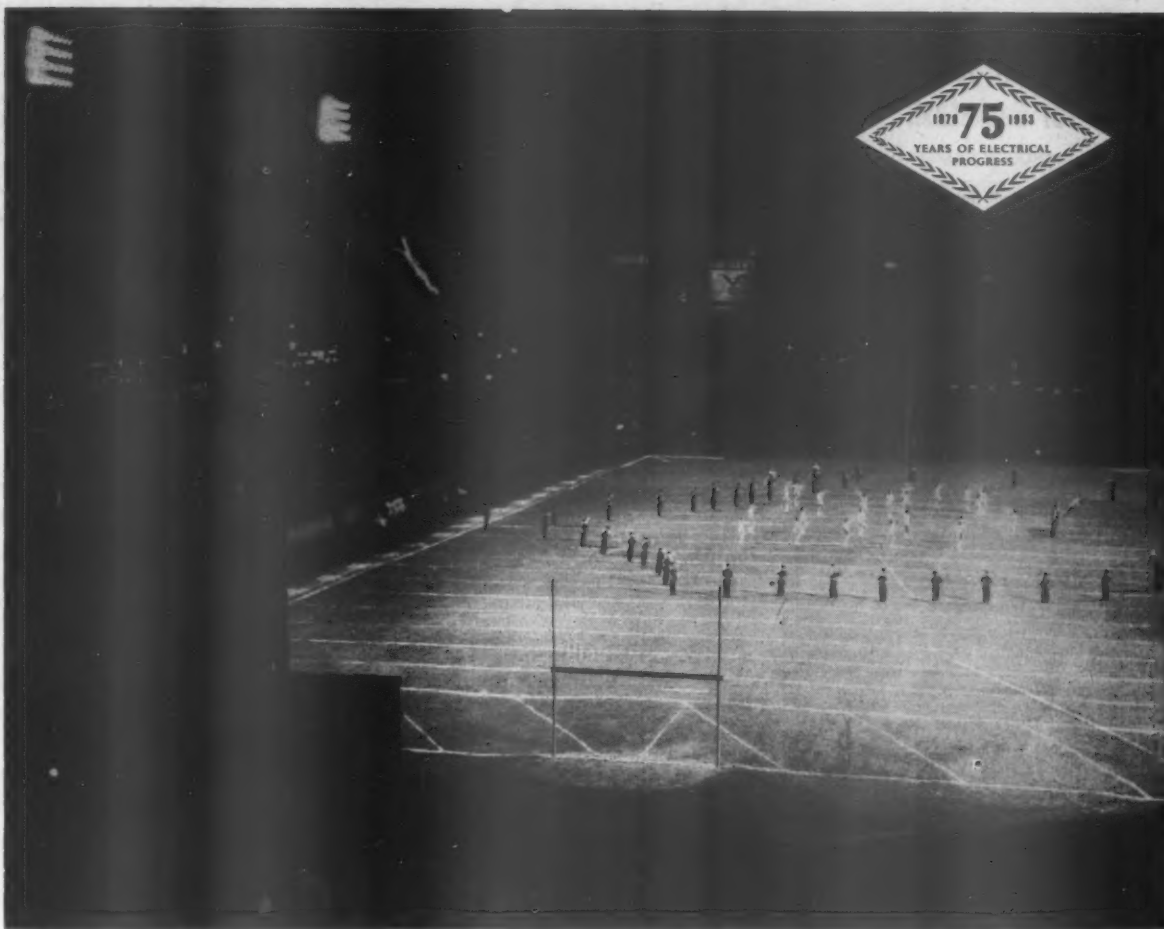
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Modern Football for the Spectator, by Charlie Caldwell. Published by J. B. Lippincott, Philadelphia, Pa. One hundred and ninety pages. Price \$2.95.

We urge every coach or athletic administrator to encourage the school library to purchase this book. We believe this to be the finest book of its type. Caldwell has done a superb job of describing the intricacies of modern football in a language readily understood by the layman.

Putting the PR into HPER. Published by the American Association for Health, Physical Education and Recreation, Washington 6, D. C. Sixty-four pages. Price \$1.00.

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One of the most interesting accounts of an interesting career we have ever read. The book is basically for the fan, but there is enough strategy and technique discussed to make it worthwhile in the library of any coach.

Recreation: Text and Readings, by Charles Brightbill and Harold Meyer. Published by Prentice Hall, New York 11, N. Y. Five hundred and forty-one pages. Price \$6.35.

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reation at Illinois and Harold Meyer is chairman of recreation curriculum at the University of North Carolina. The authors have covered the broad and extensive field of recreation in an unusual but highly competent manner. Each topic is introduced and then pertinent views of authorities are quoted from magazine articles and books.

A World History of Physical Education, by Deobold Van Delen, Elmer Mitchell, and Bruce Bennett. Published by Prentice Hall, New York 11, N. Y. Six hundred and forty pages. Price \$7.00.

This is the most comprehensive history of physical education ever written. The mammoth book is divided into six parts as follows: Physical Education in Ancient Societies; Physical Education in the Middle Ages; Physical Education in Modern Europe; Physical Education in the United States; Physical Education in Other Modern Countries; and A Panorama of World Physical Education. The book is thorough, complete, and extremely factual, and it should find ready acceptance among physical education majors and physical education teachers.

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ABC's of Sports Publicity

(Continued from page 32)

take care of papers and announcers who cannot personally cover the games. For those who do on-the-spot accounts, there must be adequate press box facilities. Early in the season, and on trips, a spotter who can identify all the players will be of much help to reporters. Telephones should be readily available, if not in the box, then not far away.

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curacy in the reports. By personally knowing the sports reporters in the area, the coach can keep tab on how his publicity program is operating. It sounds like more work for the coach, but unless he has a news bureau or publicity office to do it for him, the burden is his. His reward comes in the good notices his team gets in the sports pages and the knowledge that he is building a friendly press to help beat down the critics of school and college sports.

The Role of Psychology

(Continued from page 34)

changing conditions. His relationship with them is very often more informal than their relationships with the other teachers.

Quite frequently, weaknesses in character and symptoms of maladjustment manifest themselves only under emotional or physical strain. In some cases the tenseness accompanying close athletic competition may be

enough to reveal such irregularities of behavior. Thus, we see that the physical education teacher is in a position to observe things which may have escaped notice until a time when the manifestation would have proved much more serious.

For these reasons it would seem highly advisable for the physical education teacher to have at least a basic

training in psychology on which to work. Certainly he need not be a clinical psychologist as well as a teacher, but he should be well enough acquainted with the fundamentals to take advantage of his opportunities of observance and guidance.

In many instances the physical education teacher is charged with the responsibility of coaching teams in interscholastic athletic competition. This presents other problems of a psychological nature. For instance, the track coach is especially interested in reaction times, since in sprinting these are of utmost importance. He and other coaches are concerned with the causes and effects of pre-game jitters, methods of obtaining good team morale, the effect of drugs upon performance, and the value of incentives and rewards.

Thus, we can see that all phases of physical education have their psychological implications, and it is important to remember that they exist whether they are planned for or not. Once school administrators, and we, as physical educators, are fully cognizant of this fact, then we shall have begun making progress toward realizing some of the great potentialities which physical education possesses.

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WRITE FOR LITERATURE



One-Hand Free Throw

(Continued from page 11)

hands. In Illustration 2, Schlundt has now assumed his position for aiming at the goal. Notice that he holds the ball firmly with both hands to control it. The ball is held at a level so that he can line the top of the ball with the ring or target. Some players use the front of the ring as a target, some try to bisect the ring, and others aim for the back side of the ring. We like Schlundt's position very much as he is much more consistent when he holds the ball at the same level all of the time. The same muscular effort is needed for each throw and even though he tires late in the game, he still is consistent in his free throwing. In Illustration 3, the ball is controlled by the right hand. Illustration 4 shows the finger-tip and thumb-

tip control of the ball since daylight can be seen between the ball and Schlundt's fingers. The ball is not palmed. Illustration 5 shows the perfect form for releasing the ball with the hand and finger follow-through, and his body weight is forward and on his toes.

The side view pictures show how slight his knee bend is, and what a perfect follow-through he has as he releases the ball for the throw. The pictures all show that his eyes are on his target and he really concentrates on this part of the throw.

The rear view pictures show that good lining up with the goal is necessary. Why is Schlundt's form and technique good—the results 81.3 per cent, is great shooting.

From Here and There

(Continued from page 4)

they did right or wrong as the case might be in their last attempt . . . Charles Biband, 18 year old baseball coach at Assumption High School of Worcester, Mass., must be the youngest coach in the business . . . Sam Waughtel, football and baseball coach at Moses Brown School in Providence, R. I., for 37 years, is retiring. However, in 1929 he retired for two years, and in 1932 he retired for three years; so if history repeats itself he may be back at his post in 1956, using a mathematical progression as the basis . . . What must be the outstanding coaching record of all time is the record that Bob Kiphuth, Yale swim-

ming coach, possesses. Out of 500 dual meets, Yale has only lost 10. In compiling the record, consecutive victory cycles of 63, 65, 175, and the current 98 were accumulated . . . What is the greatest number of consecutive tie games that a football team has played? The best we have come across is five played by Wofford College in 1948, under Phil Dickens, the newly appointed Wyoming coach . . . The longest basketball winning streak in colleges is the 44 games won by Texas in the years 1913 to 1917. In more recent times Long Island (1935-37) and Seton Hall (1939-41) have strings of 43 wins.

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Analysis of Team Efficiency

By FRED HUMPHREY

Basketball Coach, Villisca, Iowa, High School

OUR great American game of basketball is distinctive because it is one of the few completely American games of all the sports activities in which we participate. By completely American is meant, in this instance, invented and developed in the United States.

Due to the tremendous popularity and the comparatively recent development of the game of basketball many challenges are presented to those in the fields of physical education and coaching who are closely connected with the sport. There is much needed research relative to rules changes, studies in the execution of fundamentals from an anatomical and mechanical standpoint, further development of offensive and defensive systems, the technical analyses of individual and team performance standards, etc. This study is devoted to a discussion of the problem of a technical analysis of team performance.

The purpose of our study was to analyze the factors in ball control and in ball possession time in relation to the performance of the winning and losing teams in basketball games. For our purposes, the term "ball control" is defined in its broadest sense, because it is felt that a knowledge of the shooting percentages from the various zones outlined later on is as much a part of ball control as the number of bad passes made or the number of traveling violations committed. Thus, ball control is summarized as planned offensive basketball rather than random offensive effort.

The technical analysis of team performance is a very controversial topic. In our opinion, basketball has been influenced too much in the past by a minority of coaches who have followed the "throw out a ball and let them scrimmage" philosophy. Thus, scientific analyses such as Howard Hobson's outstanding book, *Scientific Basketball*,¹ have been far too few in number and frequency.

Staton and Rarick made a scientific analysis of team performance from the standpoints of ball possession time and passing errors, and concluded that neither the amount of ball pos-

session time nor the number of bad passes made had any effect on the performances of the teams they studied².

There have been a number of splendid studies completed on most of the phases of team performance such as shooting percentages, the types of errors leading to loss of the ball, rebounding, ball possession time, and others; but each of these factors was studied independently in a series of games, and the influence of the other factors concerning the victory or defeat were not taken into consideration.

FRED HUMPHREY graduated from Tarkio College in 1946 and remained on for one year as assistant in all sports. Then he served for three years at Glenwood, Iowa, High School. He was assistant for one year at Arkansas City, Kansas, Junior College, before returning to Iowa high schools three years ago. Humphrey is also track coach and athletic director, and his record as head basketball coach shows 58 wins and 26 losses.

We believed that the validity and the degree of importance of the various factors of game control and of ball possession could be more correctly determined if as many factors as possible were included in one study.

Through the use of a play-by-play chart devised for this study, the progressive recording of the game as each action occurred was possible. This progressive charting of each game play-by-play was done in an effort to determine the relative influence of the various factors on the winning or losing of the games studied. Field goal shooting records were charted by dividing the court into five zones at distances of 0-5 feet, 6-10 feet, 11-15 feet, 16-20 feet, and beyond 20 feet from the basket.

The amount of ball possession time for the winning and the losing teams was recorded by timing one team with a stop watch and subtracting the time thus recorded from the total

time for each period of the game. Twenty-one of the twenty-six games included in this study were played in quarters so this group of games was used for a comparison of ball possession time and scoring.

An analysis of the data on shooting records presented strong evidence for the inclusion of this phase in a study of ball control or scientific offensive basketball. The fact that the winning teams outscored the losing teams from zone one in twenty-two of twenty-six games, had the highest shooting percentage in all five zones, and took fewer shots from zones three, four, and five, points conclusively to the fact that ball control can be defined to include the ability to maneuver offensively until openings appear for shots from the areas nearer the basket.

The recording of actual ball possession time was prompted by the study made by Staton and Rarick to which we have referred. If ball possession is considered on the basis of twenty-one game totals and from the standpoint of the average time for the winning and the losing teams or from the number of games in which the winning teams had a greater amount of ball possession time, then the results are not conclusive. However, an analysis of the twenty-one games played in quarters shows that the winning teams progressively increased their amount of ball possession time for each quarter. The winning teams also increased progressively the number of individual quarters in which they had the greater amount of ball possession time, and in the fourth quarter had a greater amount of ball possession time in seventeen of the twenty-one games. We feel it is possible to conclude that the amount of ball possession time is a vital factor, and varies directly as the intensity of the competition increases with the progress of the game.

In order to compensate for end-of-the-game stalling, Staton and Rarick made an analysis in their study which included the statistics of only the first half. It is our feeling that this is an invalid approach to the problem, for a true analysis of the effect of any factor must include the situations in which the factor has a more apparent influence as well as the ones

¹Hobson, Howard A., *Scientific Basketball*. New York: Prentice-Hall, Inc., 1949.

²Staton, Wesley M. and Rarick, G. Lawrence, "Ball Possession in Basketball," *Athletic Journal*, June, 1948, p. 26.

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in which the influence seems negligible. Basketball is more than just a game of shooting baskets, and the abilities conducive to a retention of the ball in the late stages of a game are as definitely skills of the game as the abilities which lead directly to scoring.

The statistics gained from this study support the contention of Staton and Rarick that there is no significant relationship between the amount of ball possession time and the scoring ability of the team. This conclusion must also be analyzed or it becomes misleading. The discussion of ball possession in the late stages of the game is based on the percentage possibility of converting on a field goal attempt which makes the time element of ball possession more valuable than the percentage field goal possibility unless the shot can be taken from an area near the basket.

A possible explanation of the lack of relationship between the amount of ball possession time and the scoring of the team lies in the defensive analysis of this problem. It was observed in the process of timing the games included in this study that the winning or superior teams were able to advance the ball to favorable shooting areas much more readily, and thus obtained the desired close in shots in a shorter space of time than did the losing teams. Thus, the amount of ball possession time is related to the defensive abilities of the two teams. Our conclusion on shooting records is based on the fact evident from this study, that the winning teams actually obtained a much larger number of close in shots than did the losing teams. When the two competing teams were relatively equal in offensive and defensive ability, the amount of ball possession time was in favor of the winning teams.

The question of ball possession or control was also approached from the standpoint of the actual number of ball possessions for the winning and losing teams throughout the study. Thus, we were led to the computation of the point-value-per-ball-possession figure which can be used as the most determining factor in explaining victory or defeat. Equally as important, we feel, is the fact that the point-value-per-ball-possession statistics gained from this study make possible the recommendation that the point-value-per-ball-possession figure be used as a new approach to the analysis of the relative performance levels of various teams in basketball.

A final summary of further conclusions gained from this study include:

1. The ability to score by shooting over the defense is not as consistently basic to a winning performance as many leading coaches contend. This statement is proved by the fact that the losing teams outscored the winning teams from zone five for the twenty-six game summary. The same fact was evident in the ten-game summary in which the visiting teams defeated the home teams. This fact was also borne out by the summaries for all levels of competition except the junior college division where the difference was very small in favor of the winning teams.

2. Defensive and offensive rebounding are the two most frequently used methods of regaining possession of the ball, and this ability is essential to a winning performance. The winning teams had superior rebounding percentages, from both an offensive and a defensive standpoint, for the twenty-six game summary, the ten-game summary, and the summaries for all levels of competition.

3. High school teams are weakest from the defensive rebounding standpoint, junior college teams are average, and college and university teams are the strongest in this phase of performance.

4. Weak defensive rebounding contributed to defeat in the ten games in which the visiting team defeated the home team.

5. The point-value-per-ball-possession figure of .53 is suggested as a criterion of average efficiency of team performance.

6. The relationship between a ball possession time advantage for one team and increased defensive fouling by the opposing team was very significant in the fourth quarter of the games in this study.

7. While the basic purpose of the study was not to validate the play-by-play recording chart devised to make the collection of data possible, we feel that the effectiveness of this device has been well established by the study. Through the use of this recording method it is possible for one person to follow the complete action of the game and to obtain a record which has continuity. Data of this nature will enable the coach to re-analyze the trend of the game in its true sequence instead of using only shooting charts, rebound charts, and violation charts, which give no idea of the true sequence or the result of each bad pass or fumble.

Although the statistical tabulations included in this study are relatively complete, it would be easily possible to further augment them with data

(Continued on page 62)



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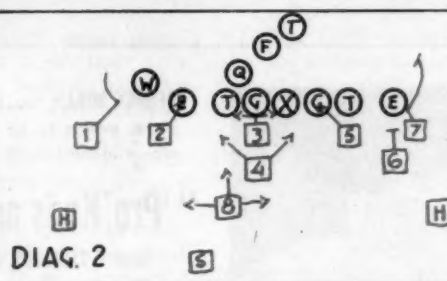
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Another Single Wing Headache

By DR. DON VELLER

Professor of Physical Education, Florida State University

OUR article entitled *A Tested Defense Against the Single Wing* appeared in the *October* issue. The defensive pattern which we are going to describe might also deserve the same title because it, too, has stood the test of game competition.

We have spent many nervous, sleepless nights wondering what defense the opposing coach was going to throw against our single wing team the following Saturday. During these insomniac periods several workable defenses were devised—all against the single wing. We played only one or two single wing teams each year; consequently, much of this effort was for naught. Since Florida State played the single wing, we had a thorough knowledge of the weaknesses of this offense. This knowledge, plus the nocturnal musings described, resulted in some pretty rugged single wing stoppers.

The personnel qualifications will be described first (Diagram 1). Players 1 and 7 have to be fairly rugged boys, because against the single wing they cannot play the *fluffy* game which is sometimes possible against the T offenses. It might help some, depending upon the personnel, for a coach to play his speediest tackle at the No. 1 position and switch the regular left end back to the No. 6 spot.

Perhaps we implied that the ends which are used against the single wing should be rugged. Nothing could be farther from our intention. One of the great advantages of the single wing develops from the fact that the ends who are accustomed to

to meet opponents head-on. Number 8 should be the best linebacker. The boy who is No. 6 will have some pass defense responsibility, so the coach should judge for himself here. Number 3 can be either a guard or a tackle but he should be fairly large.

Diagram 2 helps to show the lineup and functions against the straight single wing formation. Number 1 plays outside the wingback and comes in as an orthodox end would, three steps and out. The other end, No. 7, plays differently. He hits the end and goes around outside of him. Number 7 must *not* get hooked and he should be especially conscious of the outside when the tailback backs up. This maneuver is used to stop one of the Tennessee-type favorites which develops when the tailback backs up as if to pass and then takes off around the defensive short-side end.

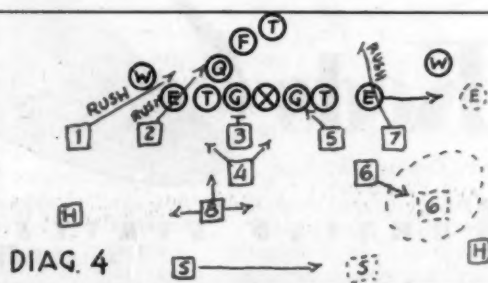
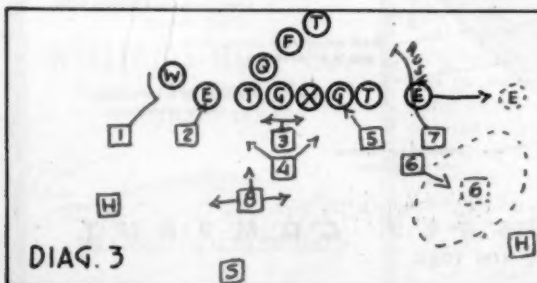
Player 2 crashes hard over the end. Number 5, who is about a foot off the line, hits hard over the guard. Number 3 hits the guard a blow and goes to the play.

Number 4 lines up in a crouched position close enough to No. 3 to touch him easily with his hand. He *keys* on the fullback and goes to meet him hard if he gets the ball. If the fullback does not receive the ball, No. 3 will almost always be in the

THIS is the third article on defense which Don Veller has prepared for us. Last May he wrote on: "A Stunting Defense Against the T." This article was followed last month by: "A Tested Defense Against the Single Wing." Veller retired from coaching this past spring after a long and highly successful career in both collegiate and high school circles.

playing *soft* against T teams find it difficult to change their style. Many times they do not even possess the necessary physique for it. One more piece of advice and we shall get back to the single wing defense. A single wing team does not want its ends crashed.

Player 2 can be the normal tackle and so can No. 5. However, the latter might easily be the larger guard. Number 4 should be a nimble boy and it will help the defense if he likes



middle of the attacking spot if he follows the fullback. Number 4 has been the real troublemaker for our opponents.

Number 8 lines up about even with the blocking back and from three to four yards back. He keys on the guards. If they pull, he follows to their inside. If they drop back, he drops back for pass defense. If they come straight ahead, he meets the play. Number 6 lines up in front of the end about one yard back and takes his key from the end.

Diagram 3 shows the adjustments against the widely split end on the short side. Number 7 is now released from his former responsibility and rushes hard. Number 6 has moved back and out as shown. He is now responsible for the outside on runs. Number 6 takes the end short if he comes at him. If the end goes long, No. 6 watches for a delayed man in the flat. All other players have the responsibilities shown in Diagram 2.

The formation shown in Diagram 4 is primarily a passing one and must be defended accordingly. Since the wingback has moved over to the short side, No. 1 can now be less cautious and rush hard. Number 6 plays about the same as he did in the situation shown in Diagram 3. Notice that the safety man has moved over to the right, compensating for the fact that two men, W and E, can now get down quickly on passes to that side. The safety now takes the deep man to the inside, thus freeing the halfback to take the outside man.

In the formation shown in Diagram 5, the fullback has moved over to make it a double wing alignment. This alignment is also a strong passing formation and must be defended with that point in mind. The only important change in this defense over that shown in Diagram 3 is in the function of No. 6. The safety man must stay on the strong side, so No. 6 plays a little deeper, five or six yards, and takes the end or fullback, whichever player comes to the inside, all the way. The halfback again covers the outside man; all others play the same. Number 4 makes one change in that he now keys on the tailback.

Diagram 6 shows that tough single wing variation where the fullback moves out beyond the wingback. Everyone plays the same as is shown in Diagram 2, with the exception of Nos. 1 and 8. Players 4 and 7 make minor changes. In order that the fullback will have less blocking angle, No. 1 drops back a yard off the line. He waits momentarily. If the play starts off tackle, he crashes. If it is

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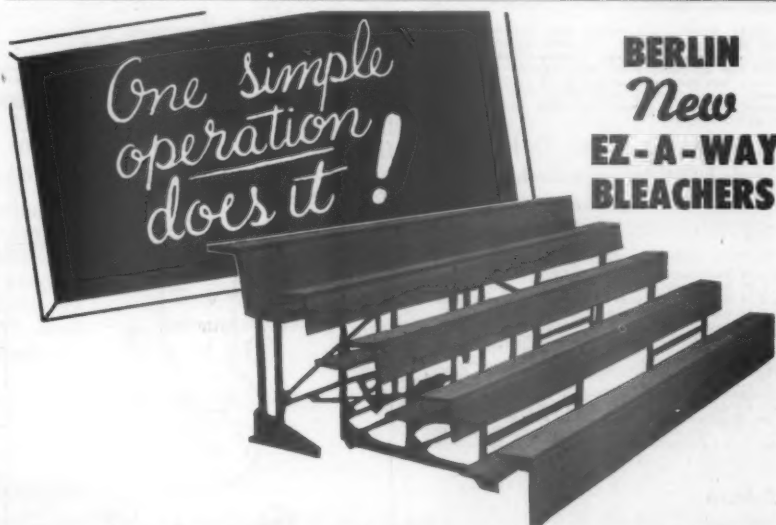
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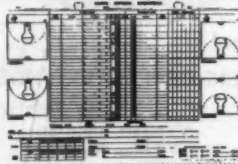
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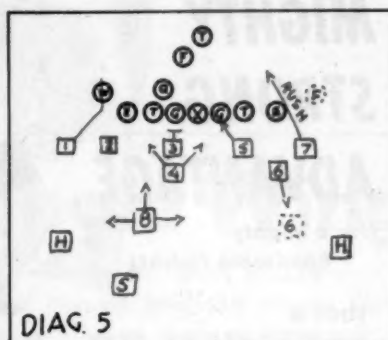


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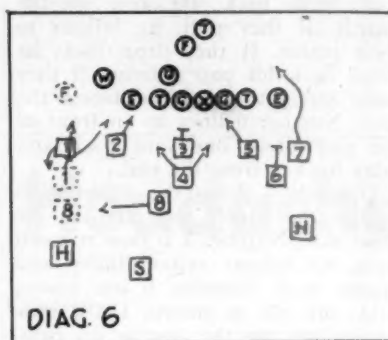
a running pass, he rushes. Number 8 plays the ball but takes the outside when No. 1 crashes. Number 8 covers the flat on passes. A short, fast pass to the strong-side end is open but we



DIAG. 5

will take a chance on it. Number 4 is again trailing the tailback. Number 7 is not quite as worried about the outside as he is in the situation which is shown in Diagram 2. However, he still must not get hooked.

In conclusion, let us call attention to the minimum number of job adjustments necessary to meet the several offensive lineup variations shown here. This defense is worthwhile,



DIAG. 6

especially in these days of one platoon football when a boy will be called upon to divide his time between learning offense and defense. Every minute counts and this defense is easy to learn and execute.

Triple Post

(Continued from page 15)

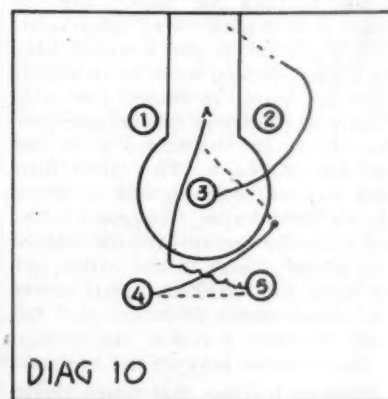
faked in and breaks a step to the outside. 02 maintains a screening position on 01 in order to allow 04 to drive around a screen and up the lane where he receives a pass back from 01. It may be necessary for 01 to use the option of driving around 02's screen on occasion.

In the play, which is shown in Diagram 9, 05 fakes the ball to 04. 03 screens on either 01 or 02. Either player may break into the hole and receive a pass from 05. A jump shot is now in order.

When a good job of covering 01 and 02 is made possible by better



DIAG. 9



DIAG. 10

Diagram 8 shows a play in which 05 feeds 04 and cuts around the inside of 04 to a position on his left. 04 feeds 05. Then 05 fakes a pass to 01 and hands the ball on a shovel pass to 04. 04 pivots and feeds a sharp pass under the bucket to 03 who has cut around and outside the double screen set up by 01 and 02.

players, 01 and 02 both break to the outside (Diagram 10). 03 fakes either way and cuts wide and then to the basket, taking his man with him. 05 passes to 04 and then screens on 04 who dribbles around the screen one or two steps. 05 rolls off 04's man and going to the basket receives a return pass from 04.

Playing the Offense

(Continued from page 30)

Each player ought to do his own thinking. He ought not depend on others to lead the attack. Basketball players should concentrate on their game just as checker players plan and figure their moves.

On the offensive a good player will not lose possession of the ball by taking long shots unless his team is behind by five to seven points and there is a short time left in which to play. Then a long try is permissible.

If the player who has the ball is set and not too far back, he may shoot and follow the ball up after the shot. A drawback with many teams on the offense is that they have one or two good scorers on the team whom they expect to do all the scoring. Naturally, these men will shoot every opportunity they have regardless of their angle or the distance between them and the basket.

If a man cannot get his shots directly under the basket, he should throw from the territory around the free throw line whenever possible. A long shot is hard to follow up although it is the duty of the men nearest the basket to follow the shot. On

the other hand, shots taken around the free throw line can be followed up with better results. A good offensive man will always follow up a shot whether he takes it or it is taken by any other member of the team. There

are many guards who wait for the ball to come to them after it strikes the basket, while the man following the ball will come in on a run, leap into the air, meet the ball, and shoot it into the basket.

A final thought on playing offense is for all players to move toward the pass and meet the ball in order to cut down interceptions.

The Underhand Free Throw

(Continued from page 10)

loosely in the shooter's finger tips and his thumbs should point directly at the basket. In a correct stance, the ball is held just below the shooter's belt with his arms bent slightly. Now, the shooter should bounce the ball a few times in order to relax his shoulders and arms.

The free throw shot is a three count rhythmical motion. On the count of one the shooter should swing the ball upward and outward to chest height and aim as if the ball were a rifle. He should return to his starting position and flex his knees on the count of two. His wrists should now be turned down with his thumbs pointing toward the floor. The degree of the

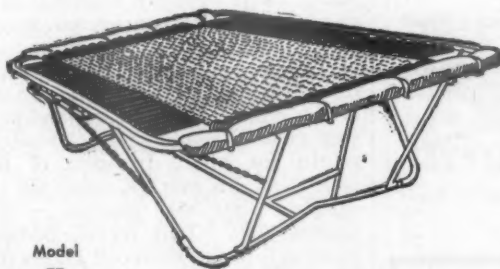
angle at which the thumbs point toward the floor will vary with individuals. Here King's thumbs form about a 45° angle with the floor. On the count of three the player should straighten his knees and swing the ball up, out, and over the front rim of the basket with a wrist flip which gives the ball a natural spin.

In the follow-through on the shot, the shooter's eyes should be on the rim of the basket and the palms of his hands should be facing the backboard, literally reaching for the basket. The last picture of the rear view sequence illustrates the correct finishing position better than does the last picture of the front view sequence.

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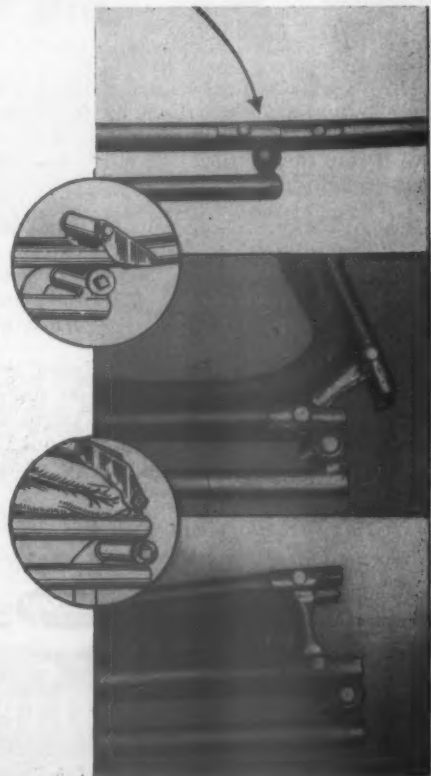
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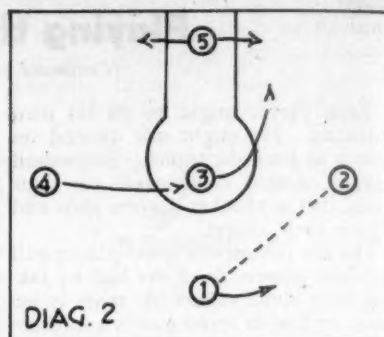
(Continued from page 26)

he can beat the front man. 05 also has the option of moving along the base line to the strong-side corner and heavily overloading the zone.

The side men are very important cogs in this attack. They should be alert to driving along the base line and if the switch is made, they should pass out to 03 or 05. These men can be especially effective if they time

their cuts into the circle to meet the ball and if they are smart enough to use 03 for a screen once they have the ball.

While we feel that this zone offense is a little more complicated than simple overloading, there is no question that it will pay richer dividends in the long run. There is a far greater chance to split the zone and to get



good shots inside, thus placing greater pressure on the entire zone. If the outside shot is desired, it is a simple matter to overload quickly to obtain it.

This offense, plus the simple rules cut to the open space and get the defense moving before trying the shot, should bother most zone teams. We heartily recommend their use.

Underhand Throw

(Continued from page 12)

made of free throw methods. During one season, we permitted our players to shoot free throws during the last half of the season by any method they desired. Half of the squad chose the underhand method, while the other half shot either with the one-hand method or the two-hand push shot method. The method chosen was the one used most frequently for floor shots by that particular player. During the first half of the season everyone shot with the underhand method. The averages were totaled for each half of the season. The average for the first half of the season, using the underhand method was .631, while the average for the last half of the season when each player shot as he desired was .623. There were not sufficient cases to permit positive conclusions. Nevertheless, the trend is interesting. Of particular significance is the record of one member of the squad. He was always certain that his two-hand push shot method would produce superior results for him. In spite of this mental set, his average, using the underhand shot was greater — .732 against .729. This record becomes more significant when one knows that his chances for free throws were greater than those of anyone else on the squad — 160 chances.

Bob Beetz, a graduate student at Springfield College, conducted a controlled experiment on free throwing. He chose 25 players who preferred to



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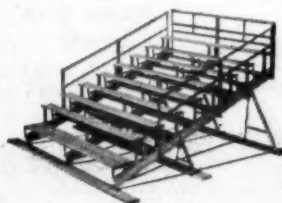
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shoot free throws by the two-hand push shot method and 25 players who preferred the underhand method. Each player threw 50 free throws per day for ten days, using his preferred method. Then, the two groups switched their methods. Those who originally threw with the underhand method adopted the push shot, and those who had preferred the push shot switched to the underhand method.

After practicing for two weeks to accustom each of the players to the new methods and to eliminate the error of *practice effect*, the groups shot 50 free throws a day for ten days. The results were tabulated and analyzed. Those players who preferred the two-hand push shot averaged .7048 when they used this method. The same group averaged .7080 when the players changed to the underhand method. The group which preferred the underhand method averaged .6942 by using this method and .6718 by using the two-handed push shot.

This study represents a total of 75,000 shots. Statistically, it did not prove to be significant but some of the by-products of the study were very startling. In one case, for example, a player practically gave up when he switched from the push shot method to the underhand method. He knew he could not shoot by the new method. At first, he could make only eight out of 50 attempts. But when he came to the testing period, he dumbfounded himself by an average of .564. His average, using the push shot method, had been .50.

The greatest individual differences in performances were found to be in favor of the underhand shot. Four members of the group which preferred to shoot overhand showed differences of 18, 18, 22 and 40 per cent between their overhand and underhand method and in favor of the underhand method. There was no case among those who preferred the underhand method where such a difference existed. Thirteen of those who preferred the overhand method did better when they shot underhand. This seems particularly significant in view of the fact that it was not possible to teach the intricate aspects of the technique of the underhand shot. Nor was it possible to supervise during the practice period as was originally planned in this study. Likewise, this evidence seems to discount the theory "that it is best to shoot free throws by the same method as that used for floor shots." Only seven of those players who preferred the underhand shot made a better record when they used the overhand method.

The strength of the evidence seems

to augur in favor of the underhand shot and supports the theories and practices which we have advocated for years. Finally it should be pointed out that merely to shoot underhand is not enough. There are certain techniques which are essential to success. These must be practiced under supervision until they become conditioned reflexes. The best test of a *grooved* underhand shot is the blindfold test. Any player who can make eight out of ten free throws with his eyes closed has attained almost perfection. Never have we observed any player who could approach this record by using either

the one-hand shot or the two-hand push shot.

The one essential technique necessary to successful performance is holding the ball correctly. Two fingers should be in front of the vertical plane which runs through the major axis of the ball and two fingers should be behind this plane. Also, the tips of the fingers should be just slightly below a horizontal plane, which runs through the major axis of the ball. This position of the fingers is very necessary if the player is to get the correct feel of the ball and if he is to be able to impart back spin to the ball without undue muscle tension.

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Free Throws

(Continued from page 9)

1. Is the shot kinesiology sound? By this it is meant that from the standpoint of body mechanics the controlling muscle groups are acting rhythmically in perfect co-ordination with no wasted or excess motion.

2. Is it a shot that allows the greatest margin of error in case the player is fatigued or if the throw is otherwise off its mark?

It is our belief that when shot properly the underhand free throw and the one-hand shot most nearly meet these criteria, with a decided preference shown for the former.

Technique of the Underhand Free Throw

In the underhand free throw the player should assume the same stance each time, with one foot just back of the line and the other foot back far enough to assure a natural position with equal distribution of the body weight. To induce relaxation the player either bounces the ball a few times or takes a deep breath, shrugging his shoulders as he exhales. He is allotted ten seconds in which to make his throw and he should not allow himself to be rushed.

The ball is held on its side, with the fingers comfortably spread. The player's arms are dropped to their full length in front of his body, thereby eliminating unnecessary contraction of the muscles of his arms, forearms, and wrists. As in all other shots, the finger tips and the wrists are the controlling factors; hence, the ball should be held just firmly enough with the finger tips to prevent it from slipping out prior to the position of release, yet not so tightly as to cause undue muscular tension. The palm of the hand should not be touching the ball.

After the player is relaxed, he fixes his eyes on the basket and starts his throw. His knees are flexed (the amount depending on the height of

the player) and the ball is brought to its position of release by raising the arms and at the same time extending the knees. The ball is released by action of the wrists. This wrist action will impart an amount of reverse spin which will deflect the ball upward if it hits the rim on any side. The follow-through should find the player with his ankles extended, and his arms overhead, with the palms of his hands facing the basket.

It should be emphasized that a soft ball must be thrown. Thus, the chances of the ball dropping through the hoop if the shot is slightly inaccurate are increased as well as allowing it to roll off easily to set the stage for a tip-in. It is imperative that the player keep his trunk erect throughout the entire shot. If there is a forward or backward lean, the player will have to compensate for this by either throwing the ball with more or less force, depending upon which way his body weight has shifted.

Although it is felt that the underhand throw is the most reliable and accurate, it should not be reasoned that just because a semblance of the underhand toss is used the player is shooting correctly. More mistakes are made when this method is used than in the case of any other. Some of the common errors that creep into a player's form are:

1. Overemphasizing the knee bend, which results in carrying the ball almost to the floor. The purpose of knee flexion is to maintain balance and to bring the body in unison with the total movement.

2. Cranking the ball up, thereby bringing into play extraneous motion that could affect the accuracy of the shot.

3. Lifting and throwing the ball with the full leverage of fixed, rigid arms instead of depending on wrist action and finger tip control. The underhand toss is essentially a wrist

DICK MORLAND took his undergraduate work at Birmingham Southern College. He coached for three years at Florida Southern and then took time out from coaching to work toward his doctor's degree. Last fall Morland went to Stetson where his team won the championship of the Georgia-Florida District in the NAIA tournament and was eliminated in the second round of the national tournament by the champion, Southwest Missouri.

shot and the player should not have to depend upon the effort of the entire body to get the ball to the basket.

4. Leaning forward with the throw, which transmits the angular momentum of the body through to the shot.

5. Failure to co-ordinate the extension of the knees with the raising of the arms. This causes a jerky movement, interrupting the smoothness of the throw by breaking the harmonious co-ordination of the total body movement.

6. Placing the hands under the ball instead of at the sides. Placing the hands under the ball will result in a palm shot, obviating the advantages of finger tip control.

The One-Hand Free Throw

Since the one-hand shot is used constantly in practice, many players have become highly effective when shooting in the same manner from the free throw line. If the individual has a large pair of hands, strong wrists, and a fine sense of depth control, he may become quite successful in using the one-hand shot for his free throws. The player probably shoots this shot ten times for every time he practices a different method of free throw shooting, and as the movements in the one-hand set shot are fundamentally the same, he can capitalize on his floor practice by utilizing the same techniques in his free throws.

Assuming the player is right-handed, he will take his position at the free throw line, with his right foot forward and his weight evenly distributed. Before commencing his throw the shooter should follow the same procedure as suggested for the underhand toss to insure relaxation.

The ball is held in the left hand with the finger tips of the right hand grasping the ball. Firmly fixing his eyes on the basket, the shooter flexes his knees slightly and at the same time he lowers his arms for the preparation of the shot. With the extension of the knees he continues the rotary motion of his arms, terminating with his fingers actually pushing the ball from his supporting hand. His left arm is dropped slightly to counterbalance the forward motion of his right arm.

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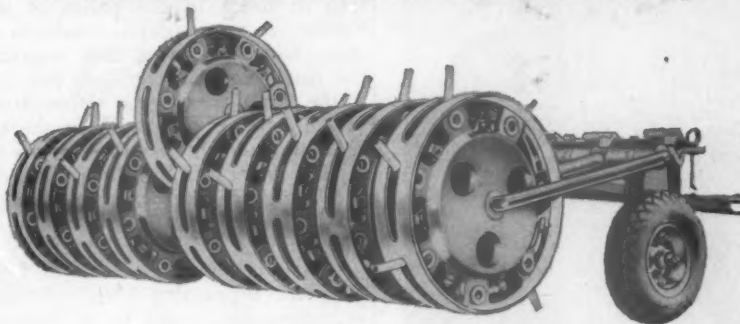
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In the follow-through, the weight will be shifted to the forward foot, but the player remains in perfect balance. His right arm will be fully extended, with his wrist flexed approximately 90 degrees from the vertical.

The most common mistake in shooting the one-hand shot is that many players treat it as a shot put instead of as one that requires the finest degree of touch that the player possesses. There is little discrimination in touch in the palms of the hands; yet many players continue to shoot from the palm, thus negating the finer sense of precision that lies in the tips of the fingers. Momentum for the shot is generated by the extension of the elbow joint, but the direction and control is determined by the action of the wrist and finger tips. The index finger should be the last to leave the ball.

Other common errors are dropping the supporting hand too soon or, conversely, using it to assist in the shot, shooting too hard and too straight for the basket, and leaning forward with the shot.

Teaching the Free Throw

The free throw of each player is given individual attention during the first week of practice. If his shot meets the above requirements, his form is studied carefully to detect any flaws in his technique that would affect the accuracy of his throw. However, if his shot is not basically sound, he is asked to try the underhand toss. This method is easy to learn and for the average player it is the safest and surest shot. Once the player adopts a particular style he works on it until it is perfected. The practice of ex-

perimenting with different throws after the season is underway is strictly prohibited.

The time for practicing the free throw is important. In our opinion, many coaches make the mistake of reserving free throw shooting until the completion of the regular practice. The players are tired and in their anxiety to get dressed and away, perfunctorily toss the ball at the basket in order to shoot the required number for the day.

Free throw shooting is too vital to the success of the team to be given less attention than the other phases of the game. Therefore, a definite period is set aside after about an hour of practice when the shots of each player are recorded. Only the two game baskets are used and the team takes the same positions as during actual play. If the player's percentage is not satisfactory, he is given additional instruction at the close of practice.

Confidence Essential

The most important point in free throw shooting is that the player develop enough confidence in himself and in his method of shooting so that he knows he will make his shot good each time he stands alone in the free throw lane. Through intense concentration he becomes impervious to the psychological impact of the crowd and other factors that would play tricks in the mind of a player who had not developed this technique. The right type of practice will develop this art.

When each member of the team achieves this frame of mind and has the shot to back it up, then his free throw ceases to be an uncertainty and truly becomes a gift toss.

Defensive Center Play

(Continued from page 16)

quires a pass defense, and it may cost the game to be caught on the line if the opposing quarterback decides to pass instead of kick. This rule, of course, does not hold for punt formation on the goal line. If a punt is made on third down, with the center backing up the line, he must block out any man coming down the middle of the field. When several attempts to block the punt are unsuccessful, the center should go up on the line when the opponents must kick, station himself in front of some lineman who has been getting down under the kicks, and prevent him from getting away when the ball is passed and kicked.

Knowing what defense to play, how to diagnose plays and get to the ball-carrier, lead up to the culmination of a successful defensive maneuver—the tackle. It is in this department of play that the defensive center must be adept. An alert, hard-tackling center can cause consternation in an offense, and he should never be satisfied until he is thoroughly trained in this department.

First, he must realize that all tackles are not made in the same way. Meeting line bucks is altogether different from tackling a runner in an open field. In the former case, the play is met low and hard on the line of scrim-

mage. This is the *only* way a backer-up may stop line bucks and close plays efficiently. No attempt is made here by the backer-up to get his arms around the ball-carrier. It is not necessary. The backer-up's arms are flexed and tensed at his sides, his head is pulled in, and his neck is rigid. The backer-up hits the ball-carrier with his shoulders. If an interferer is leading the play, stopping him in the same manner will stop the ball-carrier. This method is used only on close plays where the ball-carrier must hit the hole, and there is no room for him to dodge.

Tackling in the open field requires two things: first, that the tackler get contact with his shoulder; and second, that the tackler wrap his arms tightly around the ball-carrier's legs. In a head-on tackle in the open field, if the tackler commits himself first, the ball-carrier has no trouble eluding him. The correct method is for the tackler to stop and force the ball-carrier to commit himself. As soon as the runner veers on his final course, the tackler gets to him fast. No matter which type of tackle is required, the essential thing is to drive. There is no lunge, no reaching out for the ball-carrier. The tackler comes up fast, gets contact with his shoulders, and drives on through with short, powerful steps.

A little more attention and practice directed toward essentials, such as we have discussed in this article, will improve a center's tackling ability tremendously.

Rebounding

(Continued from page 24)

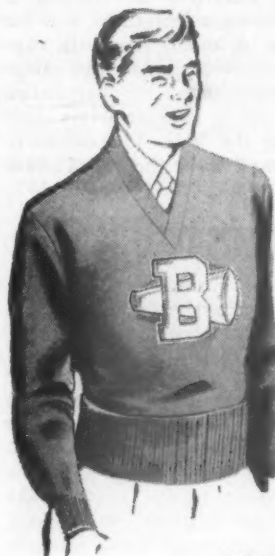
Three others, X1, X2, and X3, are stationed half way between the backboard and the free throw line. The player who has the ball lays it up against the board and calls the number of one of the three rebounders. The player who has that number goes in to rebound. Beginners will tap once and then watch to see if the ball goes in. The coach should insist that the rebounder regain position immediately. Rebounders should try to keep missed shots from hitting the floor. The best results seem to be accomplished by the use of one or both hands. Finger tips should be used, the arm should be kept straight, and the rebounder should be aggressive.

One of the common faults of rebounders who have had little experience is watching to see if the teammate's shot goes in. Three out

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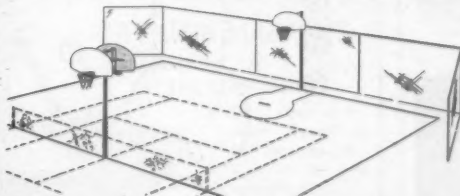
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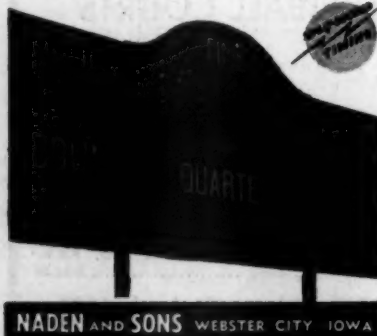
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of four shots will miss if the shooting team is making 25 per cent of its shots. One or two spectators will miss getting possession of a considerable number of rebounds during a game. A good rebounding team will have three players around the backboard, ready and willing to battle for the ball regardless of the success of a shot. Offensive rebounding of this kind will not improve the opponent's fast break. The coach should see that there are three players rebounding in scrimmage and in games.

Basically, offensive rebounding is a battle between a rebounder and his guard. The defensive man is concerned with screening out the offensive rebounder. If he is successful, the guard has a comparatively easy time getting the ball. The offensive rebounder may make the guard's task

harder by getting in front of him. Persistence will pay off. Occasionally, the guard will find himself too far under the basket and rebounds will go over his head. Thus, the defensive rebounder is eliminated, and the offense has at least a fifty-fifty chance to recover.

If the offensive player cannot get inside, there is not much he can do except watch for long rebounds. If he can get even, or in front of the guard, a hard jump upward with an extended arm may give him an opportunity for an easy basket.

Although tall boys have an advantage, the agile, aggressive, average boy is a potent force in offensive rebounding. In fact, boys of average height may be more efficient because they have better co-ordination and are more aggressive.

A Composite Offense

(Continued from page 22)

screen on the defensive man of 04. 05, at the post, moves laterally to the corner to set up the second screen on 04's defensive man. If 02 should lose his man, he drives for the basket. However, should he fail to shake loose, he passes to 01, who breaks from his corner. 02 then doubles back to complete the screen on 04's defensive man. 01 may shoot or drive if he can evade his guard. His option is to pass to 04 who breaks around either side of his screen for a shot. The player who sets up the last screen, in this case 02, comes out for defensive balance.

The Continuity

Should the gang screen pattern reach its ultimate goal, with 04 gaining possession of the ball without a clear shot, the players will be in the positions shown in Diagram 4. Immediately upon spotting this situation, 05 moves to the opposite corner.



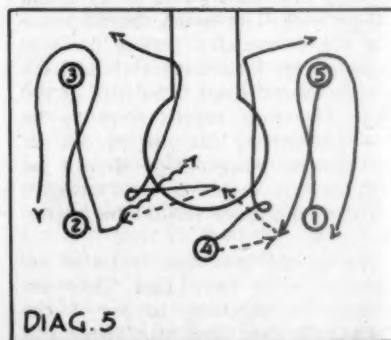
DIAG. 4

causing the original 2-3 pattern to change to a 3-out 2-in design from which our continuity pattern is run as is shown in Diagram 5.

03 and 02 may cross, as may 05 and 01, in order to rub their defensive men off. 04 then passes to 05, sets up a slow rolling screen, and breaks for the basket. 05 then drives across the middle behind the screen of 04. Should he fail to get his shot away, he passes to 03, screens, and breaks toward the basket. The sequence of the continuity, if it remains in the same direction, is 4-5-3-1-2-4, etc., until the shot is taken. Once the ball reaches the key center man, it may move in either direction. Players on the side must cross continually to stay open. Should the defense switch on the screens, the ball may be passed quickly to the man who is breaking for the basket.

Our players remain in this pattern until they lose possession of the ball. The next time they are on the offense they start in with the split post pattern again.

All of the patterns work from both sides, with the assignments being just the opposite from the other side.



DIAG. 5

Inside Weave

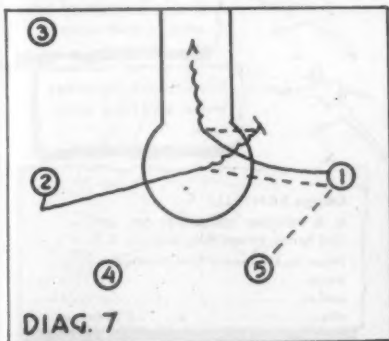
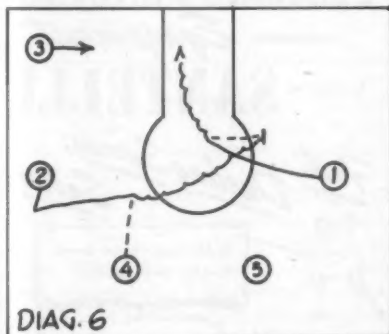
(Continued from page 17)

will provide a moving screen. If, however, the timing is off or there is a danger of blocking, then O1 may stop and set up a stationary screen.

Assuming that O1 sets a stationary screen and the defense switches, O1 may then roll off of the screen and be open for a pass from O2 (Diagram 3). Since the defensive player will be behind him it is extremely difficult to cover O1. If the defense switches prematurely, O1 may use the fake screen and cut. His defensive man should still be behind him.

Diagrams 4 and 5 show the cutting forward faking himself free and driving in for a shot without the benefit of a screen. In the play shown in Diagram 4, the cutting forward receives the pass from the guard. Either guard should be in a position to pass to the cutting forward, although receiving the pass from the guard on his original side will give him a better angle for his shot. Diagram 5 shows a play in which the same principle is utilized, but instead of receiving the pass from a guard the cutting forward receives it from the forward on the opposite side. The timing of his cut will determine from whom he will receive the pass.

Diagrams 6 and 7 show plays which are based on the same pattern as those shown in Diagrams 4 and 5. In these plays, however, O2 has found



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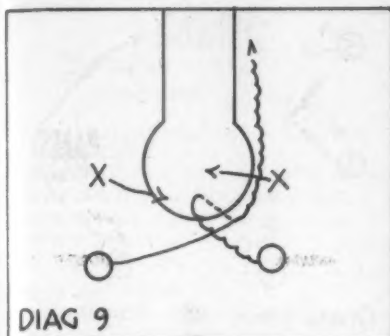
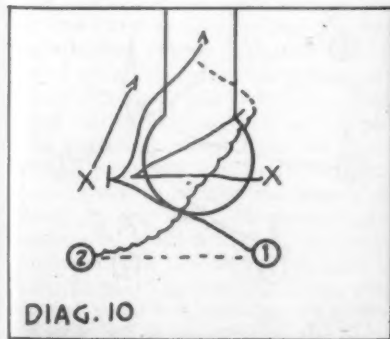


Diagram 10, combats the switching defense. 01 passes to 02 and screens 02's defensive man. If a switch by the defense develops, then 01 rolls off the screen in order to keep the defensive man behind him and drives in for a return pass by 02. As shown in the diagram, 01 should pivot on his front foot away from his switcher. This

ANDREW GRIEVE took his undergraduate work at Colgate and Villanova, playing football and basketball at these schools. During the war Grieve was in the V5 program and played football at North Carolina Pre-Flight. Following his discharge from the service he received his B.S. degree from NYU and then coached at Wellsburg, New York. Four years ago he moved to Van Etten where he coaches football, basketball, and baseball, and teaches physical education.

pivot will catch the defensive man unaware and keep 01 in front of his man, thereby making the pass much easier to complete.

In many instances the offense will catch the defense switching prematurely. This switching will occur most often after a few screens have been successful. The defense will become over-eager to stick with the driv-



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1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, John L. Griffith, 6858 Glenwood Ave., Chicago. Editor, John L. Griffith, 6858 Glenwood Ave., Chicago. Managing editor, John L. Griffith, 6858 Glenwood Ave., Chicago. Business manager, John L. Griffith, 6858 Glenwood Ave., Chicago.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise to paid subscribers during the 12 months preceding the date shown above was. (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

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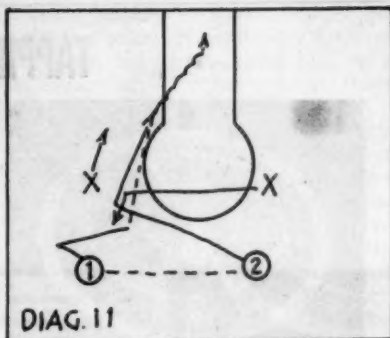
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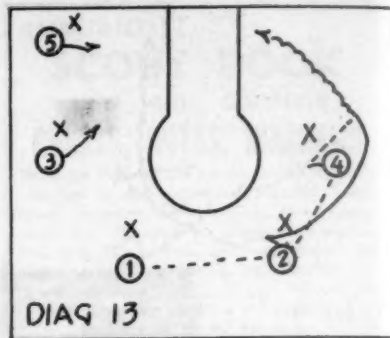
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DIAG. 11



DIAG. 13

ing guard. When our guards see this premature switch developing they use the fake screen as is shown in Diagram 11. The guard, in this case, fakes a screen and the play becomes a mere give and go. The movements are carried out exactly as they are in the normal screen except for the sudden change of direction by the guard who fakes the screen.

It will be noticed that everyone of these movements has the same fundamental pattern of development, but as in a football play sequence, the outcome is always different. The guards must be careful to work these variations on both sides because there will often be a tendency to overwork one side.

Thus far, we have discussed the forwards and the guards as independent units. To be a truly effective team the two units must work together as well as independently. We must realize, however, that the patterns mentioned previously do not always result in a score by the man who frees himself. A guard may escape his defensive man through a screen and find it more advantageous to pass to a forward who is also open. This is especially true against a team which sloughs off. Someone must pick up the free man and thus another man will be freed.

Diagram 12 shows the two units combined. 01 passes to 03. Then 01 screens 02's man, thereby freeing 02 who receives a pass from 03. Naturally, 02 may pass off to 04 or 05 if

they are in a more advantageous position for a shot. Even though 02 does not pass off, 04 and 05 will be in good positions for the rebound.

Diagram 13 shows the old guard around play. This option depends upon the guard. 02 passes to 04. Then 03 cuts through the middle on the set pattern, while 02 screens on 04 and drives around him for a possible return pass.

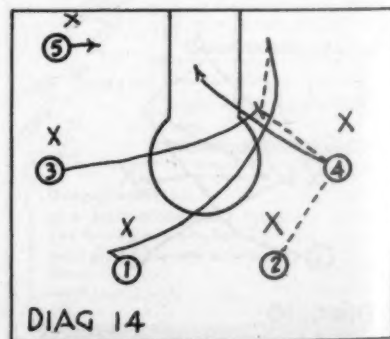
In Diagram 14 we see a pattern similar to the one which is shown in Diagram 7. In this pattern the forward, 04, cuts off the screen set up by 03 and 01 does likewise. This is a simple split of the post on the rotating pivot.

The number of options which may be developed from this pattern is almost unlimited. We have found the boys setting up sound plays of their own after using this pattern for some time. One important factor which has caused this pattern to be successful is that the boys talk to each other. They call a screen or roll and thus keep their teammates aware of the ensuing developments.

In conclusion, we believe this offense has been of definite value to us. It is not our only offensive pattern against a man-for-man defense, but it has been our most effective offense. The caliber of the players will naturally determine the success of any team. But this offense is easy to teach and easy to learn and there are times when these qualifications are extremely important.



DIAG. 12



DIAG. 14

Bowling

(Continued from page 13)

not be controlled. Be alert to stop the return ball with your foot. Be sure the pin setters are out of the way before releasing the ball. 3. *Spectators, Bowlers or Pin Setters.* Do not cross the alleys.

Practicing these rules does more than make children conscious of the need for following regulations. Rules teach consideration for others through the constant practice of courtesy. It is a practical demonstration that manners have been developed for a real reason. Observance of rules is an expression of our consideration for the rights and feelings of other people and it facilitates our getting along with other people. Basic instruction in bowling skills such as proper starting position of the ball, approach steps to the foul line, delivery, and follow-through is given. Further, we attempt to teach the techniques of scoring and the delivery position for hitting certain combinations of pins.

Each child who participates acquires three things: a basic game skill; the rules of the game; enough confidence to allow him to enter into this sport without the usual embarrassment which most adults face; and an appreciation that the consideration, feelings, and comfort of other people should help to decide our behavior.

As we began to develop this bowling activity back in 1948, it was kept in mind that it should be conducted the way it is in bowling establishments. The local bowling alley proprietors aided us in acquiring equipment by furnishing the necessary pins, balls, and scoring sheets. A local rubber company supplied the 60 foot by 3 foot rubber mats. We had the other equipment on hand such as gymnasium mats and locker room benches.

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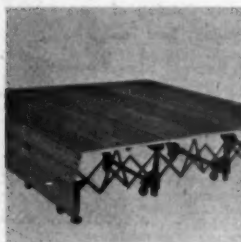
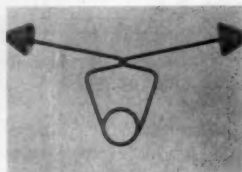
NEW ITEMS IN EQUIPMENT AND IDEAS

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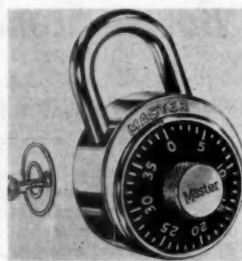
HERE is a product for which there has long been a need. Cramer's Hand Cleaner will quickly and efficiently remove Sun Glare Black from the face and hands. It also removes Tuf-Skin, Firm Grip, and Black Magic from the hands. A teaspoonful worked around the grimed area and then rinsed under the faucet does the trick. It contains no abrasives or alkalies harmful to the skin and will not smart cuts or skin abrasions. It will not foul sink or clog drain. Cramers of Gardner, Kansas or any sporting goods dealer.

WITH the rapidly approaching end of the football season we cannot think of a better item to discuss than this hanger for the storage of helmets. The tapered wooden tips fit securely into the helmet ear holes and the spring-action of the hanger pushing outward neatly preserves the helmet's shape. Needless to say, they are ideal for drying helmets as well as storing them. A. G. Spalding and Bros., 161 Sixth Ave., New York 13, N. Y.



THE Horn folding stage is the answer to a vexing problem faced by many schools that are forced to use the gymnasium for assemblies and public gatherings. Instead of the slow, tedious process of erecting a stage, it is only necessary to roll the Horn folding stage into place, unfold it, and secure it in place with a few quick turns of the floor stops. The stages are available in standard heights of 15 and 24 inches and in standard widths from 6 to 16 feet. Each section is 22 inches wide and folds into a space 3½ inches deep. Brunswick-Balke-Collender Co., Chicago, Ill.

THESE new stainless steel locks replace the Master brass combination locks so long preferred by athletic departments. Stainless steel is especially suitable for locker rooms because it is rust-resistant and will not corrode under humid locker room conditions. The locks are built to stand up under rough athletic department usage. The case-hardened locking latch is virtually impossible to shear and there is a built-in sound effect to thwart picking of combinations. This is the finest lock on the market, bar none. Master Lock Co., Milwaukee 45, Wisc.



ONE method of stretching the athletic budget dollar is by the use of steel chain basketball nets. For outdoor courts where weathering of nets is a problem, the advantage of these chain nets is obvious. On indoor courts they are equally desirable for they are guaranteed for three years against breakage, scratching, unraveling, tangling, ripping, and cutting. The manufacturer has done a remarkable job as far as eye-appeal is concerned because they closely resemble the cloth nets. Jayfro Athletic Supply Co., P. O. Box 1065, New London, Conn.

SHOWN with Ralph Kiner is Sam Doak of the Bancroft Company. The two are discussing the action of the rules committee of both major leagues which unanimously recommended a change in the wording of the rules to permit the use of a laminated bat. Final action will take place in January when a vote will be taken of all major league teams in this regard. The Bancroft laminated bat has been approved by the College Baseball Coaches Association and the National Federation. Bancroft Racket Co., Pawtucket, R. I.



Alley balls are deflected into the padded wall. Also, these benches provided a place behind which the pin boys could stand and be reasonably safe from rolling balls and flying pins. The ends of the rubber mats, away from the pins, were used to simulate the foul line on a real alley. Another function of the rubber mats was to prevent scuffing of the gymnasium floor as the ball came in contact with it and to silence the noise of the ball rolling over the floor. All participants must wear rubber-soled shoes, and they should be constantly aware of a possible injury which might occur if their legs are hit by a rolling ball.

A bowler approaches the foul line using the required number of steps (usually 3, 4 or 5) and releases the ball close to the floor above the rubber mat. The pin boy retrieves the ball and rolls it back slowly on the mat to the bowler who stops it with the sole of his shoe. A bowler must not stop the ball with his hands because his fingers may very easily be injured if they are pinched between the ball and the floor. If necessary, a second ball is thrown to knock down any pins that remain standing.

It is our belief that this activity should not be limited to any particular school or to any particular size gymnasium. With a little ingenuity and a little expense, an opportunity can be provided for students to engage in wholesome recreation which has a tremendous carry-over value.

Team Efficiency

(Continued from page 44)

from the recording chart. Such factors as the number of baskets scored directly on fast break thrusts, the number of field goals scored directly on rebounds, the number of times each team converted errors by the opponent into field goals, etc., could be determined by referring to the recording chart.

UNFORTUNATELY, this item is so new that we were unable to receive a photograph before going to press. The product is the famous Shadograph electric basketball scoreboard. It will be recalled that in this unique scoreboard the scores are projected on to ceramic-coated glass. The new board will use the projection method of recording the minutes and seconds of playing time left. The new control panel includes a fully automatic time-out clock built into the panel. Full information may be had from Shadograph Mfg. Co., Anchor, Ill.

The Changing Sport Scene

(Continued from page 18)

Generally speaking, in the northern states the springs are so late that little outdoor activity is possible before the latter part of April. Consequently, for all but the limited number of schools participating in the final rounds of the state basketball tournaments, there is an unusually long interval of time without athletic competition.

Also, it is generally true that there are more good days for outdoor activity in the fall than in the spring. It is our personal belief, and we believe athletic trainers will verify the fact, that a football player having gone through eight or more weeks of conditioning will not be as susceptible to injuries in which cold weather is a contributing factor as will the baseball or track athlete who is just reporting for outside practice.

We feel that by pushing the sport seasons ahead the schools located in the southern half of the country have made a very wise move. Certainly, with the first evidence of spring, the interest of players and spectators alike turns to outdoor activities.

In the northern half of the country the interval between the conclusion of basketball and outdoor workouts for spring sports is somewhat lengthy.

We feel that states should prepare their athletic calendars with the average weather conditions for the area as one of the determining factors. We do not feel that the practice of the professional sports promoters should be followed in the scheduling of school and college athletic contests.

Dr. Naismith invented basketball because there was not a competitive game to be played when weather forced the termination of the outdoor fall sports season.

Basketball is a truly American game and deserves a prominent spot in our American sports picture. However, a lengthened season with the first games in mid-November and possible conclusion in mid-March is, in our opinion, too much of a good thing. Particularly is this true when it encroaches upon another truly American game.

Each sport deserves its time on the sport scene. We hope that school men in states where there are few if any regulations regarding the length and starting dates for sport seasons will recognize these facts and take steps to correct them.

We further hope that in establishing school sport calendars, school men will keep in mind that football is traditionally a fall sport and should be played during that season and not in the summer before schools reopen. Likewise, it should be remembered that basketball should be a winter indoor sport and should be played when the weather precludes outdoor activity.

COACHES READY REFERENCE SERVICE COUPON

NOVEMBER, 1953

As a service to our readers and for their convenience we list here the advertisers appearing in this issue. Many of the concerns offer free booklets and coaching aids. Simply cut along the perforated rule and mail to:

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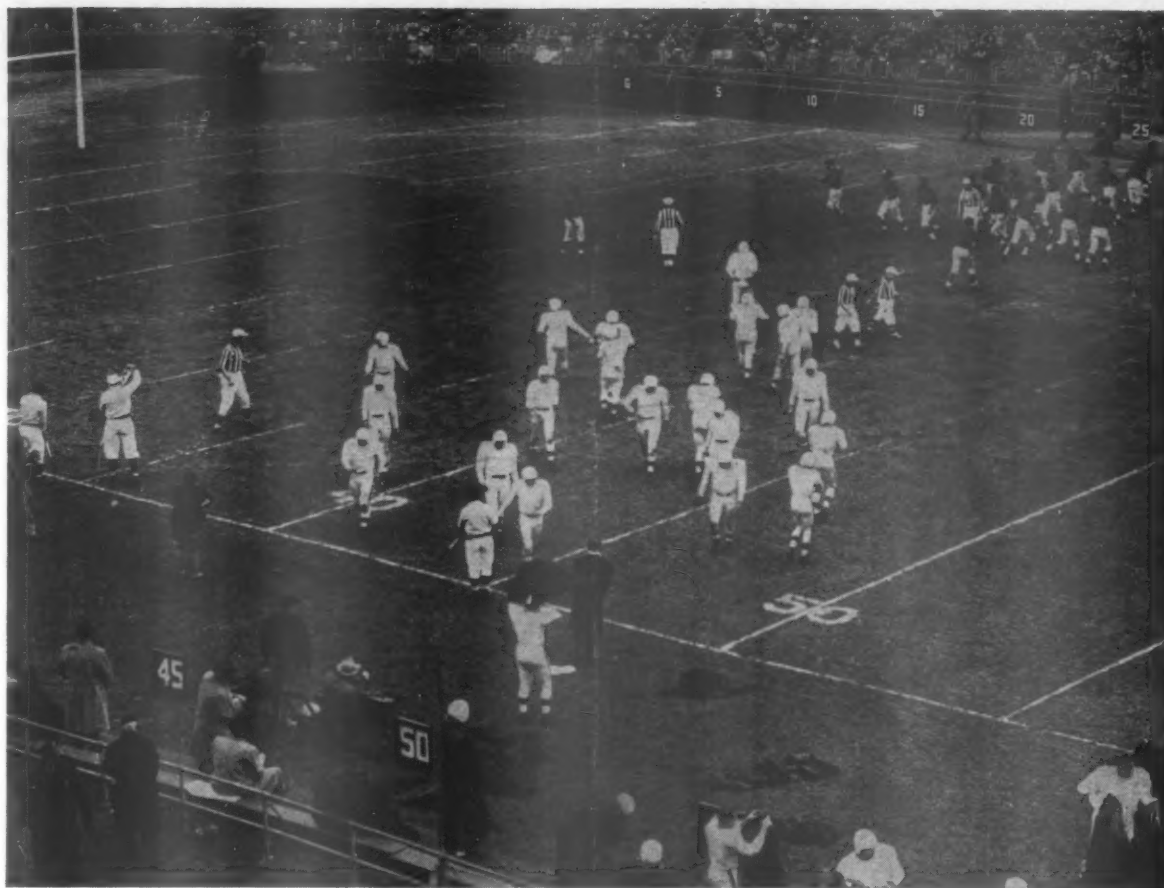
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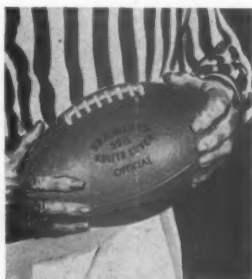
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